



CAD Administrator Manual



Spillman® Public Safety Software

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Preface

Welcome to the *CAD Administrator Manual*.

This manual is written for administrators about how to set up and maintain the Computer-Aided Dispatch module for Spillman Flex.

Other manuals

The *Application Setup and Maintenance Manual* provides information for the Spillman Application Administrator (SAA) at your agency, including procedures for installing and maintaining Spillman. The *Code Table Setup and Maintenance Manual* provides information for adding and maintaining your agency's code tables. The *Security Setup and Maintenance Manual* provides information for protecting your agency's system and setting up system privileges.

Windows basics

Before using Spillman, be familiar with the standard features of Microsoft® Windows®. At a minimum, know how to do the following:

- Use a mouse or keyboard to perform basic tasks, such as choosing menu options and buttons
- Work with windows, such as selecting, minimizing, restoring, maximizing, sizing, scrolling, closing, and so forth
- Work with dialog boxes

If these tasks are unfamiliar, then refer to your Windows online documentation or complete an online Windows tour.

Manual conventions

When using this manual, note the following conventions.

Convention	Meaning/Use	Examples
bold	Used for names of options, text boxes, buttons, fields, and other items that appear on the screen.	OK is a button on the screen. Click OK , or press Enter.
angle bracket (>) between items	Shows the menu option(s) that must be selected, in sequence, to get to a specific option.	From the Start menu, select All Programs > Spillman > Spillman Mobile .
plus sign (+) between keys	Used for keys that are pressed at the same time. Hold down the first key, and then press the other key(s). When a keystroke is available for a mouse action, both the mouse action and the keystroke are presented.	Press Ctrl+E. Click Close , or press Ctrl+F4.
comma (,) between keys	Used for keys that are pressed in sequence. Press and release each key, in the order shown.	Press Alt, F, O to open the File Options dialog box.
Courier font	Used for displayed text. Used for Spillman table names.	The software prompts: Are you sure you want to delete this record? Open the Spillman Names table (nmmain).
bold Courier font	Used for information you enter.	Enter the street address, such as 401 W Sycamore St.
<i>italics</i>	Used for emphasis. Used for variable information you supply.	Enter the date, using the <i>mm/dd/yyyy</i> format.

The following boxes indicate special information.

NOTE

Notes call attention to information that is of particular importance or that varies depending on a particular condition, such as the way your Spillman Application Administrator (SAA) has configured the software.

TIP

Tips present recommendations, optional actions, and additional ways to perform specific tasks.

CAUTION

Cautions point out actions that might endanger your data or its integrity (usefulness) or cause other problems later.

Features on your computer depend on your software version, modules, and privileges. Actual screens on your computer might vary from the example screens shown in this manual. However, any differences are minor and do not affect the tasks being described.

To find more manuals, visit [MySpillman](#) or the [Spillman Knowledgebase](#).

Chapter 1

Setting Up Code Tables

Jump to topic:

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Introduction

This chapter describes the code tables used in CAD. For more information about setting up code tables, see the *Code Table Setup and Maintenance Manual*.

List of Code Tables

The following is a list of code tables used in CAD.

cdkeys

The CAD Function Keys Setup table contains the CAD hotkeys that your agency uses. For more information, see [“Customizing the CAD Keypad” on page 120](#).

Identifier

Enter the code use to identify the CAD Function keys setup. Up to 10 alphanumeric characters are allowed.

Key 0-13

Enter the function performed for each hotkey. Up to 60 alphanumeric characters are allowed.

cdoffst

Officer Status is a pre-loaded code table used by multiple tables throughout the software.

Officer Status

Enter a code for the status of the officer. Up to four alphanumeric characters are allowed.

Desc

Enter a description of the officer status. Up to 30 alphanumeric characters are allowed.

Avail

Indicates whether the officer is available to cover an assignment. Enter **Y** for yes or **N** for no.

cdpos

Dispatch Positions Table codes are used to create new dispatch positions.

Abbr

Five characters, alphanumeric field. Enter a code for the dispatch position.

Desc

30 characters, alphanumeric field. Enter a description of the dispatch position.

Printr

30 characters, alphanumeric field. Enter the name of the printer assigned to this dispatch position.

cdrustat

The Main Radio Log Table is a pre-loaded code table used to create the call types that your agency uses.

Status

Five characters, alphanumeric field. Enter the status designated by the main radio log.

Order

Five characters, numeric field. Enter the order in which units should be listed for the dispatcher to choose from. For example, if the status should be the fifth in the list, then enter 5.

Spacer

Three characters, numeric field.

cdspeci

The Special Instructions table is used to make the software prompt the dispatcher to view special instructions when adding calls of a particular nature. For example, you can make the software automatically prompt the dispatcher to view special instructions after the dispatcher enters the call nature `Heart attack`.

Abbr

15 characters, alphanumeric field. Enter a key word or phrase to describe the topic to which these instructions apply. This might be the call nature as coded in the Nature of Call table (`tbnatur`).

Sinstr

1999 characters, alphanumeric field. Enter the special instructions.

cdttys

Terminal Mapping Table for CAD is used to connect each dispatch terminal with the appropriate E-911 position.

Printtty

30 characters, alphanumeric field. Enter SDS Display variable of the dispatch PC.

E911pos

Two characters, alphanumeric field. Enter E-911 position that corresponds with the dispatch position entered.

Tddtty

30 characters, alphanumeric field. Enter a brief description of the terminal's location or function. For example, `dispatch console`.

Scndtty

30 characters, alphanumeric field. Enter the secondary SDS Display variable of the dispatch PC.

Termtyp

15 characters, alphanumeric field. Enter the terminal type.

Desc

30 characters, alphanumeric field. Enter a brief description of the terminal type.

cdunit

Unit codes are used by tables throughout the software.

Unit Number

Six characters, alphanumeric field. Enter the number used to identify the unit.

NOTE

Make sure you create unit numbers that are not the same as CAD commands or the abbreviations of CAD commands. If the unit number is the same as a CAD command, then when you enter the unit number in the command line, CAD runs the command instead of creating a radio log entry for the unit. For example, if you create the unit number `e9` for engine nine and a dispatcher enters `e9 paged`, CAD reads `e9` as the `e911` command. For a complete list of the CAD commands, refer to the *CAD User Manual*.

Description

30 characters, alphanumeric field. Enter a description of the unit.

Unit Type (L,F,E)

One character, coded field. Enter the type of unit, or click the Lookup button (Ctrl+E) to open a list of valid codes.

Unit Kind

Five characters, coded field based on the values in `tbvehknd`. Select the kind of unit from the drop-down list. For example, `paramedic`.

Display Flag

One character, numeric field. Determines whether the unit appears on the CAD Status screen. Enter **1** to always display the unit on the CAD Status screen. Enter **0** to display the unit when it is in any status besides not on duty. Units that have ONDT status will not appear.

Persons Required

Three characters, numeric field. The minimum number of officers the unit must carry when on duty.

Agency

Four characters, coded field based on the values entered in `apagency`. Enter the agency to which the unit belongs. Click the Lookup button (Ctrl+E) to open a list of valid codes.

Primary Zone

Five characters, coded field based on the values entered in `tbzones`. Enter the primary zone to which the unit is assigned. Click the Lookup button (Ctrl+E) to open a list of valid codes.

Contact Method

18 characters, alphanumeric field. Enter the method used to contact the unit. For example, `radio`.

Station

15 characters, coded field based on the values entered in `cdstatn`. Enter the station to which the unit is assigned. Click the Lookup button (Ctrl+E) to open a list of valid codes.

Shift

15 characters, coded field based on the values entered in `tbshift`. Enter the shift to which the unit is assigned. Click the Lookup button (Ctrl+E) to open a list of valid codes.

Equipped with MDC

One character, coded field. Determines whether the unit is equipped with MDC. Enter **Y** for yes or **N** for no.

Officer

detail field. 15 characters, coded field (`apnames`). The name of the officer assigned to the unit. Click the **Detail** button (Ctrl+N) to open the Officers Assigned detail window.

Stat

4 characters, coded field (`cdoffset`). The status of the officer, such as assigned and available or on sick leave. Click the Lookup button (Ctrl+E) to open a list of valid codes.

Status Change Time

military time, format mm/dd/yyyy. The time and date that the status of the assigned officer changed.

Comment

30 characters, alphanumeric field. Any comments relating to the assigned officer.

rptburot

Unit Rotation table is used to set up rotations. To use rotations, you must set up the Rotation Type table before you set up the Recommended Units table.

Type

15 characters, alphanumeric field. The type of rotation.

rpuniall

Unit Allocation Plan are referenced in the Unit Allocation Detail table.

Number

9 characters, alphanumeric field. The record number of the Unit Allocation Plan.

Agency

4 characters, alphanumeric field. The code used to designate the agency.

Kind

5 characters, alphanumeric field. The specific code used to designate the kind of unit.

Avail

5 characters, numeric field. Designate the number of units available for the Unit Allocation Plan.

tb10code

The Unit Status Ten-Codes table is a pre-loaded code table used to indicate the status of a unit. For more information, see [“Setting up the Unit Status Ten-Code table” on page 34.](#)

Unit Status

Enter a ten-code or an abbreviation for the status of a unit. Up to five alphanumeric characters are allowed.

Meaning

Enter a description of the ten-code or abbreviation entered in the **Unit Status** field. Up to 30 alphanumeric characters are allowed.

Action

Enter the action code associated with the value in the **Unit Status** field, or select a value from the lookup list. The value must be an integer, and up to three characters are allowed.

Define at least one unit status code for each action code in the following table. To assign the same action code to more than one unit status code, assign the positive value of the action code to the main status. Assign the negative value of the action code to all other unit status codes associated with the action

code. For more information on using multiple unit status codes with an action code, see [“Translate to Primary Def” on page 25](#). The following table lists the preloaded action codes and their definitions.

Action Code	Definition
1	On duty
2	In service
3	En route to new station
4	Returning from scene
5	Call being entered
6	Call received
7	Assigned to a call
8	En route to a call
9	Arrived on scene
10	Completed call
11	Backup unit
12	Busy
13	Out on violator
14	Out of service
15	Out at home
16	Off duty
17	Accident
18	Wrecker needed
19	Ambulance needed
20	Location known
21	Location assigned
22	Cancel
23	Wanted person inquiry
24	Driver license inquiry

1 Setting Up Code Tables

List of Code Tables

Action Code	Definition
25	Stolen vehicle inquiry
26	Vehicle registration inquiry
27	Property inquiry
28	Paged
29	Driver license alert inquiry
30	Traffic stop
31	Special Name Inquiry
32	Unit Location
33	En route to Hospital
34	Arrived at Hospital
35	Cleared Hospital
36	Canceled Unit
37	In Quarters
38	Incident Controlled
39	Officer assigned to unit
40	Unavailable due to cross-staff

Minutes Allowed for Action

Enter the number of minutes a unit can remain at this status. Up to four numeric characters are allowed.

When the status of a unit changes to the status entered in the **Unit Status** field, a timer is started for the number of minutes entered in this field. If the status of the unit does not change before the timer expires, then the Call record is moved to the top of the status window and the text in the **Time** column for the unit changes to red.

Enter 0 (zero) to not calculate a time-out value for this status.

NOTE

The software allows you to enter a value in this field only if the value in the **Action** field is a positive number.

Enter a time-out value for only your most important calls. Because the software moves all calls that have timed out to the top of the list, entering time-out values for too many call natures might override the normal ordering of calls.

Is Unit Available

Determines whether units assigned this unit status are available for dispatch.
Enter **Y** for yes or **N** for no.

Translate to Primary Def

One character, coded field. Determines whether the software translates a unit status code assigned the negative value of an action code to the main status (the unit status assigned the positive value of the action code).

- If the unit status code is assigned the positive value of the action code, enter **N** for no.

- If the unit status code is assigned the negative value of the action code, then use the following table to determine which value to enter.

Value	Description
Y	<p>Enter Y for yes if you want the software to translate the unit status assigned the negative action code to the main status.</p> <p>For example, the ten-code 17 and the status ENRT both use the action code 8 for en route. Ten-code 17 is assigned the negative value of the action code, and ENRT is assigned the positive value of the action code. If you enter Y in this field, when a dispatcher enters the ten-code 17, the software displays the status ENRT in the radio log and on any CAD screens that display the status of units. The software also uses the timeout value and unit availability values assigned to the main status ENRT.</p>
N	<p>If you enter N for no in the Translate to Primary Def field, then the software looks for the unit status in the Responding Units Status Orders table (cdstatse).</p> <ul style="list-style-type: none"> • If the unit status is in cdstatse, the software looks at the status in the corresponding Becomes field and then uses the values in that status's tb10code record. • If the status is not in cdstatse, the software uses the values in the status's tb10code record. For CAD functions using this status, the message No Default Status Sequence Detail found might appear. <p>Make sure the value in the Is Unit Available field is the same as the value entered in the tb10code record for the main status. This prevents the software from making different recommendations for statuses that use the same action code.</p>

NOTE

For action codes -2 and -14, enter **N** in the **Translate to Primary Def** field. The software does not translate these action codes.

Send to Mobile

Determines whether the status can be used in Mobile. Enter **Y** to use the status in Mobile. Enter **N** or leave the field blank to not allow the status in Mobile.

Drive Time Delay in Minutes

Determines whether an additional delay in drive time should be added for this status. When recommending units, this time is added to the drive time for the unit. For example, if the value is 10, then an additional 10 minutes is added to the drive time calculations. Up to three numeric characters can be added.

tbpdterm

The Determinant Codes table is referenced in the CAD Master Call (*cdcall*), Cover Status (*cdcover*), Response Plans (*rpmain*), and Recommended Units (*recunit*) tables. Designate the categories of determinants that your agency uses.

Determ ID

Enter the abbreviation used to identify the determinant code. Up to five alphanumeric characters are allowed.

Determinant

Enter the determinant code. Up to 11 alphanumeric characters are allowed.

Meaning

Enter the full description of the determinant code. Up to 80 alphanumeric characters are allowed.

tbnatur

Nature of Call is a pre-loaded code table used by many tables throughout the software, including the CAD Calls, Law Incident, Fire Incident, and EMS Incident tables.

Nature of Call

Enter the nature of the call exactly as it should be entered in the **Nature** field of CAD screens. For example, heart attack. Up to 15 alphanumeric characters are allowed.

TIP

To track property watch requests in CAD, make sure to enter it as a possible call nature.

CAUTION

If a *tbnatur* record contains values in the **Alternate Wordings** field, contact Spillman Technical Services before modifying the **Nature of Call** field. Making any modifications to the **Nature of Call** field without the assistance of Spillman Technical Services will cause the software to lose the link between the alternate wordings and the modified call nature. When contacted, Spillman Technical Services will create a custom screen so that the call nature can be modified and the link can be maintained between the alternate wordings.

For all other fields in *tbnatur*, including the terms in the Alternate Wordings field, the regular code table maintenance instructions apply. For more information, see [“Defining Call Natures” on page 60](#).

Auto Create Incidents

Helps determine whether the software creates an incident for calls of a specific nature. Enter **Y** to automatically create an incident for that nature. Enter **N** to not create an incident for a specific nature. The default value is **Y**.

If the values in the `noinci`, `noasinci`, and `noczinci` application parameters prevent the software from creating incidents for a particular agency, the software does not create an incident for that agency, regardless of the value in the **Auto Create Incidents** field.

Additional Description

Enter a description for the call nature. Up to 30 alphanumeric characters are allowed.

Alternate Wordings

Enter any additional words that users can enter for this call nature. For example, if the call nature is `Heart Attack`, enter **Chest Pain**, **Stroke**, and **Difficulty Breathing** as alternate wordings. If a user enters an alternate term in the **Nature** field, then the software changes the call nature to `Heart Attack`. Click the **Detail** button (Ctrl+N) to open the detail window and add additional alternate wordings.

NOTE

The terms entered in the **Alternate Wordings** field must be unique to the call nature. Terms that are already defined as a call nature or alternate wording for another call nature cannot be entered.

Default Priority

Determines the priority of the call nature. The CAD Status screen orders the calls according to their assigned priority. The lower the number the more urgent the call. A blank field has the highest priority, followed by numbers, and then by letters. For example, a call nature with a priority of 5 is more urgent than a call nature with a priority of 6. A call nature with a priority of 6 is more urgent than a call nature with a priority of C. Up to one alphanumeric character is allowed.

Send to Mobile

Determines whether calls for the nature are displayed in Mobile. Do one of the following:

- Enter **Y** to allow calls for the nature to be displayed in Mobile.

- Enter **N** to not allow calls for the nature to be displayed in Mobile.

Special Instructions

Determines whether the dispatcher is prompted to open special instructions for the call. Enter **Y** to prompt the dispatcher to open the special instructions. Enter **N** or leave the field blank to not display the prompt. Set up the instructions in the Special Instructions table (cdspeci). For more information, see [“Setting Up Special Instructions” on page 71](#).

Launch Call Protocol

Determines whether a supported third-party call taking protocol, such as ProQA or 9-1-1 Adviser, is launched when the nature is entered for a call. Select any of the following values:

N: Does not launch a call taking protocol.

Y: Launches the installed call taking protocol.

P: Launches the Police protocol. This value is for ProQA only.

F: Launches the Fire protocol. This value is for ProQA only.

M: Launches the Medical protocol. This value is for ProQA only.

Minutes to Enter

Enter the number of minutes the dispatcher has to add the call after entering the call nature. If the dispatcher does not add the call before the timer expires, then the Call record is moved to the top of the status window and the text in the **Time** column for the unit changes to red. Up to three numeric characters are allowed.

Enter **0** (zero) to not calculate a time-out value for the call.

NOTE

Enter a time-out value for only your most important calls. Because the software moves all calls that have timed out to the top of the list, entering time-out values for too many call natures might override the normal ordering of calls.

Agency

Enter the agency for the nature, or select the agency code from the drop-down list, if desired. This allows natures to be filtered by agency on the list screen.

Minutes to Assign

Enter the number of minutes the dispatcher has to complete the entry of the call after clicking **Accept** (Alt+A). If the dispatcher does not complete the call entry in the number of minutes specified, then the Call record is moved to the top of the status window and the text in the **Time** column for the unit changes to red. Up to three numeric characters are allowed.

Enter 0 (zero) to not calculate a time-out value for the call.

NOTE

Enter a time-out value for only your most important calls. Because the software moves all calls that have timed out to the top of the list, entering time-out values for too many call natures might override the normal ordering of calls.

Allowed in Mobile

Determines whether a nature is allowed in Mobile when adding a call. Do one of the following:

- Enter **Y** to allow the nature when adding a call from Mobile.
- Enter **N** to not allow the nature when adding a call from Mobile.

Minutes to Respond

Enter the number of minutes the dispatched unit has to respond to the call and update its status. For example, from ASSGN to ENRT. If the unit does not respond in the specified amount of time, then the Call record is moved to the top of the status window and the text in the **Time** column for the unit changes to red. Up to three numeric characters are allowed.

Enter 0 (zero) to not calculate a time-out value for the call.

NOTE

Enter a time-out value for only your most important calls. Because the software moves all calls that have timed out to the top of the list, entering time-out values for too many call natures might override the normal ordering of calls.

Minutes to Arrive

Enter the number of minutes that the dispatched unit has to arrive at the call after the dispatcher updates the unit's status to ENRT. If the status of the unit does not change before the timer expires, then the Call record is moved to the top of the status window and the text in the **Time** column for the unit changes to red. Up to three numeric characters are allowed.

Enter 0 (zero) to not calculate a time-out value for the call.

NOTE

Enter a time-out value for only your most important calls. Because the software moves all calls that have timed out to the top of the list, entering time-out values for too many call natures might override the normal ordering of calls.

Minutes to Complete

Enter the number of minutes that can elapse between the time a unit arrives at the scene and the time the unit completes the call. If the status of the unit does not change before the timer expires, then the Call record is moved to the top of the status window and the text in the **Time** column for the unit changes to red. Up to three numeric characters are allowed.

Enter 0 (zero) to not calculate a time-out value for the call.

NOTE

Enter a time-out value for only your most important calls. Because the software moves all calls that have timed out to the top of the list, entering time-out values for too many call natures might override the normal ordering of calls.

Call Type (l,f,e)

Enter the type of call. Up to three characters are allowed.

More than one call type can be entered. For example, a structure fire might require both fire fighting equipment and emergency medical personnel. Enter multiple call types without commas or spaces. For example, enter **1e** for Law and EMS.

The following table lists the possible call types.

Code	Description
l	Law
f	Fire
e	EMS
m	Miscellaneous (No incident record generated)
i	Information (No incident record generated)

Law Offense Code

If this is a Law-type call, then enter the main offense code associated with this nature or select a value from the lookup list. The list is based on the values entered in `tboff`.

Fire Condition Code

If this is a Fire-type call, then enter the main fire condition associated with this nature or select a value from the lookup list. The list is based on values entered in `frtbcond`.

EMS Condition Code

If this an EMS-type call, then enter the main EMS condition code associated with this nature or select a value from the lookup list. The list is based on values entered in `emtbcond`.

tbvehknd

The Public Safety Vehicle Codes table is a pre-loaded code table used in the Units table (`cdunit`) and the Responding Units Status Order table (`cdstatse`) in the CAD module and in other tables throughout the software.

Vehicle Kind

Enter a code for the type of vehicle. For example, AC for animal control unit. Up to five alphanumeric characters are allowed.

Description

Enter a description of the vehicle. Up to 30 alphanumeric characters are allowed.

Vehicle Kind Aliases area

The **Vehicle Kind Aliases** area is used by the Recommended Units feature to determine how units are sorted based on their vehicle kind alias. If your agency uses the Recommended Units feature, then click the **Detail** button and complete the following fields:

- **Alias:** Enter an alias for the vehicle. At least one alias must be entered. If only one alias is entered, then use the value in the **Vehicle Kind** field.
- **Primary:** Identifies whether the alias is also a primary vehicle kind. If the alias is a primary vehicle kind, then enter **x**. For example, if the value in the **Vehicle Kind** field was entered for the

alias, then enter **Y**. If the alias is not a primary vehicle kind, then enter **N**.

- **Concurrent Functions:** Enter the vehicle kind codes for any additional functions the vehicle can perform. For example, if a first responder unit (FR) can also function as a paramedic, then enter **PAR**.

tbwreck

Wrecker Company codes are referenced in the Vehicle table and the CAD module.

Wrecker Code

Enter a code for the wrecker company. Up to four alphanumeric characters are allowed.

Wrecker Company

Enter the name of the wrecker company. Up to 30 alphanumeric characters are allowed.

Call Person 1

Enter the name and phone number of the first person to contact for service. Up to 30 alphanumeric characters are allowed.

Call Person 2

Enter the name and phone number of the second person to contact for service. Up to 30 alphanumeric characters are allowed.

Call Person 3

Enter the name and phone number of the third person to contact for service. Up to 30 alphanumeric characters are allowed.

Call Person 4

Enter the name and phone number of the fourth person to contact for service. Up to 30 alphanumeric characters are allowed.

Address

Enter the street address of the wrecker company. Up to 30 alphanumeric characters are allowed.

City, State Zip

Enter the city, state, and ZIP code for the wrecker company. Up to 30 alphanumeric characters are allowed.

Vendor Number

Enter the vendor number for the wrecker company. Up to 15 alphanumeric characters are allowed. This field is not required.

Agency

Enter the agency for the wrecker company, or select a value from the lookup list. The list is populated based on the values in `apagency`. This field is not required.

wrrotyp

Wrecker Rotation Type codes are referenced in the CAD Active Wreckers Backdoor (`wractiv`), Wrecker History Log (`wrhistory`), and Wrecker Rotation Status (`wrrotate`) tables.

Rotation Code

Enter a code for a wrecker rotation type. For example, separate rotations for each agency or for different areas of your agency's jurisdiction can be defined. Up to two alphanumeric characters are allowed.

Description

Enter description of the wrecker rotation. Up to 30 alphanumeric characters are allowed.

Agency

Enter the agency for the rotation, or select a value from the lookup list. The list is populated based on the values in `apagency`.

Setting up the Unit Status Ten-Code table

When Spillman is installed, sample Unit Status codes are set up in the Unit Status Ten-Code table (`tbl0code`) and the Responding Units Status Order table (`cdstatse`). The software uses Responding Units Status Order table to define the status sequences for responding units and to translate Unit Status codes. To simplify the addition of a new unit status code, enter **N** for no in the **Translate to Primary Def** field. This prevents you from having to change the

default status sequences in the Responding Units Status Order table. You can modify the status sequences later if needed. For more information on Responding Units Status Order table (cdstatse), see [“Setting Status Sequences for Responding Units” on page 177](#).

Tips for setting up Unit Status codes

Use the following information to help you define Unit Status codes for the following action codes:

- Action codes 2 and 14 are used to make the status of a unit either in service or out of service. The software does not translate Unit Status codes assigned the negative value of these action codes to the main status (the status assigned the positive value). The software treats Unit Status codes assigned either the negative value or positive value of these action codes the same. If you define more than one unit status for the action code 2 or 14, make sure you enter a different description for each unit status in the **Meaning** field.
- Action code 17 is used with on-site calls to add a call and formally dispatch the officer to a call that he or she called in.
- Action codes in the range 23–27 are used for wanted person, driver’s license, stolen vehicle, vehicle registration, and property inquiries. For more information on performing inquiries, see the *CAD User Manual*.

Understanding how the cdcallid parameter works with tb10code

The application parameter `cdcallid` determines whether a dispatched unit’s call ID is retained when you change the status of the unit.

- If `cdcallid` is set to **YES**, the unit remains on the original call until you enter a status that has the action code 10 (CMPLT).
- If the `cdcallid` is set to **NO**, the action code associated with the status you use determines whether the unit is removed from the call.

The following tables categorize the action codes by how they affect a unit’s status. For more information on the application parameter `cdcallid`, see [“Setting Up CAD Application Parameters” on page 43](#).

NOTE

The unit status codes in the following tables are only samples. The response of an action code applies to any unit status code associated with it.

1 Setting Up Code Tables

List of Code Tables

In CAD, when you enter a unit status associated with one of the following actions codes, the status of the unit does not change.

Action Code	Unit Status Code
0	Other
5	INPUT
6	RCVD
18	WRCKR
19	AMBUL
22	CANCL
23	NMINQ
24	DLINQ
25	VHINQ
26	VHREG
27	PRINQ
29	DAINQ

In CAD, when you enter a unit status associated with an action code in the following table, the status of the unit changes but the unit remains assigned to the call.

Action Code	Unit Status Code
4	RETRN
8	ENRT
9	ARRVD
28	PAGED

In CAD, when you enter a unit status associated with an action code in the following table, the status of the unit changes and the unit is removed from the call.

Action Code	Unit Status Code
1	ONDT
2	INSRV

Action Code	Unit Status Code
3	ONAIR
7	ASSGN
10	CMPLT
11	BCKP
12	BUSY
13	OVIOL
14	OOSRV
15	OHOME
16	OFFDT
17	OSA
20	LCKNO
21	LCASN
30	TS

Setting up code tables for related modules

The following modules have code tables that interact with CAD but are not documented in this manual. For information on setting up code tables for related modules, see the manual for that module.

- **Geobase.** The code table information for the Classic Geobase, Sentryx Geobase, and GeoValidation modules can be found in the *Classic Geobase Administrator Manual*, the *Sentryx Geobase Administrator Manual*, and the *GeoValidation Manual*.
- **Paging.** The code table information for the Paging interface can be found in the *Zetron Interface Guide* and the *Paging Interface Guide*.
- **Response Plans.** The code table information for the Response Plans module can be found in the *Response Plans Administrator Manual*.

Chapter 2

General CAD Setup

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Introduction

This chapter provides information you will need to set up the CAD module. If you want to set up the CAD module to recommend units, see [“Setup for Recommend Units” on page 129](#).

Spillman offers three options for the Computer-Aided Dispatch module:

- Computer-Aided Dispatch (CAD)
- Computer-Aided Dispatch with Geobase (CAD-Geo)
- Computer-Aided Dispatch with Geobase and Response Plans (CAD-Resp)

You must know which CAD you have purchased. Most of the instructions in this chapter apply to all three CAD options. Items specific to CAD with Geobase are marked “CAD-Geo.” Items specific to CAD with Response Plans are marked “CAD-Resp.”

Limited Access CAD

Limited Access CAD (caddo) is a view-only version of the CAD status screen. This program is useful for duty officers, supervisors, and other users who need to monitor dispatch without adding, modifying, or deleting information. Limited Access CAD requires no additional setup.

Overview

The following table lists the required tasks to set up CAD.

CAD setup task	Where to find instructions
Set up common application parameters.	<i>Application Setup and Maintenance Manual</i>
Add or modify common codes as needed.	<i>Code Table Setup and Maintenance Manual</i>
Add or modify codes required by CAD.	“Setting Up Code Tables” on page 15
Set up other modules used with CAD.	“Setting Up CAD-Related Modules” on page 42
Set up application parameters required by CAD.	“Setting Up CAD Application Parameters” on page 43
Define call natures.	“Defining Call Natures” on page 60
Set up Law, Fire, and EMS incident numbers and CAD Call numbers so that they never conflict.	“Setting Up Incident Creation” on page 63

CAD setup task	Where to find instructions
Set up special instructions for dispatchers.	“Setting Up Special Instructions” on page 71
Set up officer and unit information.	“Setting Up Officer and Unit Information” on page 73
Set up the Traffic Stop command.	“Setting Up the TS Command” on page 91
Set up alarm codes.	“Setting Up Alarm Codes” on page 101
Record personnel skills.	“Recording Personnel Skills” on page 111
Define wrecker codes and rotations.	“Defining Wrecker Codes and Rotations” on page 112
Set up ten-codes for the CAD Driver License Alert Inquiry Command.	“Setting Up the DQA Command” on page 118
Change CAD commands assigned to numeric keypad keys, or add and save other sets of assignments.	“Customizing the CAD Keypad” on page 120
Change the format of the CAD status screen, if desired.	“Customizing the CAD Status Windows” on page 122
Set up recommended unit plans (CAD or CAD-Geo) or response plans (CAD-Resp).	For recommended unit plans see “Setup for Recommend Units” on page 129 . For response plans, see the <i>Response Plans Manual</i> .
Set up unit status and sort order for dispatch.	“Setting Up Recommended Units Lists” on page 136 and “Sorting the Recommended Units Lists” on page 141
Define whether the software should automatically list recommended units.	“Telling CAD when to display the recommended unit list” on page 139
Set status sequences for responding units.	“Setting Status Sequences for Responding Units” on page 177
Define application cue cards for CAD.	“Setting Up Application Cue Cards” on page 107
Set up CAD to recommend water sources. This feature requires the Fire Records Management module and either CAD-Geo or CAD-Resp.	<i>Application Setup and Maintenance Manual</i>
Set up the Resource table with special equipment and vehicles.	<i>RMS User Manual</i>

Setting Up CAD-Related Modules

In addition to setting up CAD, you must set up any CAD-related modules your agency purchased. The following table lists the CAD-related modules and where to find setup information.

Module	Where to find setup information
Classic Geobase, Sentryx Geobase, or GeoValidation	The product manual for the module
E9-1-1	<i>The E9-1-1 Interface Manual</i>
Response plans	<i>Response Plans Setup Instructions</i> (includes application parameters and code tables specific to response plans)
Law Records Management	<i>The Application Setup and Maintenance Manual</i>
EMS Records Management	<i>The Application Setup and Maintenance Manual</i>
Fire Records Management	<i>The Application Setup and Maintenance Manual</i>
Equipment Maintenance	<i>The Application Setup and Maintenance Manual</i>
Any other modules that you must access from CAD	The product manuals for those modules

Setting Up CAD Application Parameters

Set up the following application parameters in the Application Parameters table (apparam) as needed. For application parameters related to the Traffic Stop command, see [“Setting Up the TS Command” on page 91](#).

Parameter	Description	Value
actwants	Display Only Active Wants in CAD	YES/NO
	Determines whether the Wants field displays only active warrants when you enter a call address and restricts the lookup list to active warrants. Set actwants to YES to display only active warrants in the Wants field and the lookup list. Set actwants to NO to display both active and inactive warrants in the Wants field and the lookup list. The default value is YES .	
cadactto	Time Limit for CAD Alert Count	numeric
	Determines whether your agency limits the time CAD spends searching for names, alerts, and warrants. Either set cadactto to 0 (to allow CAD to search for names, alerts, and warrants without a time limit), or enter the maximum number of seconds CAD is to search. For example, to instruct CAD to search for 5 seconds, set cadactto to 5 . The default value is 0 .	
cadcallq	CAD: Adding Calls Ask Question	YES/NO
	Determines whether, when a dispatcher completes a call, the software assumes the call is ready for dispatch or the software prompts the dispatcher to make sure. Set cadcallq to YES to prompt for dispatch verification. Set cadcallq to NO to automatically dispatch and change the status of the call to <i>RCVD Received</i> . The default value is NO . Note: If cadcallq is set to NO and callrcvd is set to ACCEPT or END , when a call-taker or dispatcher clicks Cancel while adding a call , CAD displays a message, asking to confirm whether the call should be deleted. <ul style="list-style-type: none">• If the call-taker or dispatcher clicks Yes, the software deletes the call.• If the call-taker or dispatcher clicks No, the software closes the Add Call screen and saves the call. Setting the parameter values in this manner allows CAD users to close a call without losing information, while not allowing the call to be dispatched until a user re-opens the call and completes it.	
caddelim	Delimiter to override cadnowin	A single character
	Specifies a character that users can enter, at the end of certain CAD commands, to override the cadnowin application parameter. For example, if cadnowin is set to FALSE , the CAD commands open their associated windows if the caddelim character is not used. However, if a user adds the caddelim character to the end of the CAD command, the software skips the window. The default character is a period (.).	
cadhtime	Use CAD Hold Until Time	YES/NO

2 General CAD Setup

Setting Up CAD Application Parameters

Parameter	Description	Value
	<p>For response time reports, determines whether response times on hold-until calls are calculated from the hold-until time or the call-in time. Set <code>cadhtime</code> to YES to use the hold-until time. Set <code>cadhtime</code> to NO to use the call-in time. The default value is NO.</p> <p>This parameter affects all response time reports, including CAD Call Response Time, CAD Call Time by Location, CAD Call Avg. Resp. Times, CAD Avg. Response Time Detail, Fastest CAD Call Response Times, CAD Call Address History, CAD Call Narrative Search, E911 Data Response, CAD Call Excessive Resp Times, CAD Call Dist. Of Resp. Times, CAD Call Response Time Log, CAD Calls by Day and Time, and Total CAD Calls Received.</p>	
<code>cadmax</code>	CAD Maximum Refresh Time	numeric
	Sets number of seconds of inactivity before the CAD status screen is updated. The screen is updated only if no pop-up windows are open and the cursor rests at the CAD command line. The default value is 15 seconds.	
<code>cadmin</code>	CAD Minimum Refresh Time	numeric
	Sets number of seconds that must elapse between CAD status screen refreshes. Updates of the status screen normally occur after each CAD command is executed. The automatic update will not be done if fewer than <code>cadmin</code> seconds have elapsed since the last update. The default value is 5 seconds. Never enter a value less than 2.	
<code>cadnowin</code>	Skip CAD windows by default	TRUE/FALSE
	Works with the <code>caddelim</code> application parameter to determine whether, for certain CAD commands, the software opens the associated command window when a user enters the command. Set <code>cadnowin</code> to TRUE to prevent the software from opening the windows. Set <code>cadnowin</code> to FALSE to have the software open the windows. The default value is FALSE . To have the software function the opposite of how the <code>cadnowin</code> parameter is set, users can enter the character defined in <code>caddelim</code> (such as a period) at the end of the command.	
<code>cadrasu</code>	Reassign Responsible Unit	YES/NO
	<p>Determines what the software does when an officer receives a call while already assigned to a call. Set <code>cadrasu</code> to YES to reassign the officer to the second call and return the first call to "pending." If multiple units are assigned to the first call, the responsible unit should not be reassigned unless all other responding units are reassigned. The software does not move the first call back to the non-dispatched band unless the responsible unit is the last to be dispatched. If the responsible unit is not dispatched until last, use the RU command to make a different unit the responsible unit.</p> <p>Set <code>cadrasu</code> to NO to keep the officer assigned to both calls. Reassigning the responsible unit changes the call's status to ASSGN regardless of whether other units are assigned to the call. The default value is NO.</p>	

Parameter	Description	Value
callrcvd	When is call received or ready?	ADDRESS, ACCEPT, END
	<p>Determines the user action that is to make the software change the status of your agency's calls from INPUT to RCVD. The options are:</p> <ul style="list-style-type: none"> • ADDRESS (when the address is entered). This is the default value. • ACCEPT (when the user saves a call by clicking Accept). If you set <code>callrcvd</code> to ACCEPT and set <code>cadcallq</code> to YES, then when the user saves the call, a message asking to confirm whether the call is ready to be dispatched is displayed. <ul style="list-style-type: none"> – If the user clicks Yes in response, the software marks the call as ready for dispatch but keeps the Add a New Call screen open so that the user can continue adding call information. To close the screen, the user clicks Accept again. – If the user clicks No in response to the prompt, the software closes the Add a New Call screen without marking the call as ready for dispatch. • END (when the user saves a call by clicking Accept). CAD closes the Add a New Call screen after the user saves the call. <p>Note: If <code>callrcvd</code> is set to ACCEPT or END, and <code>cadcallq</code> is set to NO, then when a call-taker or dispatcher clicks Cancel while adding a call, a message asking to confirm whether the call should be deleted is displayed.</p> <ul style="list-style-type: none"> • If the call-taker or dispatcher clicks Yes, the software deletes the call. • If the call-taker or dispatcher clicks No, the software closes the Add Call screen and saves the call. <p>Setting the parameter values in this manner allows CAD users to close a call without losing information, while not allowing the call to be dispatched until a user re-opens the call and completes it.</p>	
calltime	When is the call time set?	START, ADDRESS, RCVD, END
	<p>Determines the point at which a call's time is set, or recorded. The options are:</p> <ul style="list-style-type: none"> • START (when the call is added). This is the default value. • ADDRESS (when the address is entered). • RCVD (when the call achieves the status RCVD). • END (when the call is accepted). 	
cdagcyro	Use agency unit for responsible officer	TRUE/FALSE
	<p>Determines if the software assigns a responsible officer from the agency of the incident rather than an officer from the responsible unit. For example, a call that involves units from three different agencies will create incidents with three different responsible officers (one from each agency). The first unit dispatched from each agency will be used to assign the responsible officer of the incident. In the case where no unit responds from the agency of the call, the software uses the responsible unit to assign the responsible officer for the incident of the call.</p> <ul style="list-style-type: none"> • If you set <code>cdagcyro</code> to YES, the software updates the responsible unit of an incident from the same agency as the agency of the incident. • If you set <code>cdagcyro</code> to NO, the software updates the responsible unit of an incident from an officer of the responsible unit. All incidents created from the CAD call have the same responsible officer. 	

2 General CAD Setup

Setting Up CAD Application Parameters

Parameter	Description	Value
cdalias	Prompt if complainant is an alias	YES/NO
	<p>Determines whether, when a dispatcher enters an alias name in the Complainant field of a call screen, the software displays a prompt asking whether the user wants to use the real name instead of the alias name. Set cdalias to YES to prompt the user. Set cdalias to NO to automatically accept the alias name without prompting the user. The default value is NO.</p> <p>For instructions, see “Displaying a Prompt if Complainant Name is an Alias” on page 126.</p>	
cdarrive	Unit arrived	YES/NO
	<p>Determines whether the status of a call changes to ARRVD upon the arrival of any unit or only upon the arrival of the responsible unit. If you set cdarrive to YES, the status of the call changes to ARRVD when the status of any assigned unit changes to ARRVD. If you set cdarrive to NO, the status of the call changes to ARRVD only when the status of the responsible unit changes to ARRVD. The default value of cdarrive is NO.</p>	
cdautorp	Make DC command autorun RP	YES/NO
	<p>Determines whether the DC or DU command automatically runs the RP command for calls with an associated response plan. The cdautorp apparam affects your agency only if you use the Response Plans module. The default value is NO.</p> <ul style="list-style-type: none"> If you set cdautorp to YES, the DC or DU command functions like the RP command for calls with response plans and opens the associated response plan. If you set cdautorp to NO, the DC or DU command functions as normal. <p>Be aware of the following information when setting the cdautorp application parameter to YES.</p> <ul style="list-style-type: none"> The cadnowin application parameter does not apply. For example, suppose you have cdautorp set to YES and cadnowin set to skip the associated command windows. If you use the DC or DU command to dispatch a call with an associated response plan, the software opens the response plan window and all other windows associated with dispatching the call. For calls with an associated response plan, you cannot use recommended units independent of the response plan. If the software cannot find a response plan that matches the alarm level specified at the command line, the software does not recommend units. However, recommended units will run for all calls that do not have a response plan. 	
cdcallid	Retain unit's callid	YES/NO
	<p>Determines whether a dispatched unit's call ID is retained when you change the status of the unit. If you set cdcallid to YES, the unit remains on the original call and only action code 10 (CMPLT) will remove the call. If you set cdcallid to NO, the action code (in tb10code) determines whether the unit is removed from the original call. For more information, see tb10code in Appendix A of the <i>Code Table Setup and Maintenance</i> manual.</p>	
cdccscr	CAD Closed Call Script	\$FORCEDIR/rpt/cdcall.r1
	<p>Tells the software to run the specified script. When you close a CAD call, the cdcall.r1 script collects data related to the call and displays it in a report. The parameter also tells the software to open the printer dialog box so you can select a print destination. The cdccscr application parameter can also run other perl scripts. Contact Technical Services for more information.</p>	

Parameter	Description	Value
cdce911	Put 911 info in cdce911 table	YES/NO
	<p>You can use the cdce911 application parameter to determine whether the software stores E911 information in the CAD E911 Data screen (cdce911) or in call comments. The default value is NO.</p> <ul style="list-style-type: none"> Set cdce911 to YES to have the software store E911 information in the CAD E911 Data screen (cdce911). Set cdce911 to NO to have the software store E911 information in call comments. 	
cdcfagcy	Conc func outside units agency	YES/NO
	<p>Determines whether concurrent functionality for a unit applies to units when they are outside their agency boundaries. This can be an issue for agency assists if your agency uses mutual aid. The default value is NO.</p> <ul style="list-style-type: none"> Set cdcfagcy to YES to have recommended units allow a unit's concurrent functionality to apply when a unit is outside of its agency boundaries. Set cdcfagcy to NO to have recommended units ignore a unit's concurrent functionality when the unit is outside of its agency boundaries. 	
cdcname	Is complainant name entered?	YES/NO
	<p>Determines whether the Complainant field appears on the Add Call screen and the Calls table. Set cdcname to YES to display the Complainant field so that the user enters the name information and the software searches to see whether a matching Name record exists.</p> <p>Set cdcname to NO to prevent the Complainant field from appearing. The user can enter the complainant name in the Contact field if needed. The Contact field does not search the Names table.</p>	
cddupinc	CAD duplicate incident range	numeric
	<p>Applies for CAD-Geo and CAD-Resp. Determines how close together two active calls can be (in geobase units) before the software alerts the call-taker that they might be duplicate calls. For example, if your geobase is set up with a block roughly equal to 100 units, you might enter 50 as the cddupinc value so that the software alerts the call-taker to all active calls within a half block area.</p>	
cdinput	Allow dispatch of calls with INPUT status	YES/NO
	<p>Use the cdinput application parameter to determine whether dispatchers can dispatch calls that have the status INPUT.</p> <ul style="list-style-type: none"> Set the cdinput application parameter to the default value (No, False, or 0) if you do not want to allow dispatchers to dispatch a call with the status INPUT. Set the cdinput application parameter to Yes, True, or 1 to allow dispatchers to dispatch a call with the status INPUT. 	
cdlocmd	CAD Login Command Enabled	ON, OFF, FORCE
	<p>Determines whether users can enter temporary logins during shift changes. Set cdlocmd to ON (the default) to allow use of a temporary login and to allow users who enter an invalid login to cancel out to the CAD command line. Set cdlocmd to OFF to prohibit all users from using temporary logins. Set cdlocmd to FORCE to allow users who select the LO command to enter a login but not return to the CAD command line if the login is invalid. The software's control keys, the MAIL and RUN keys, and the CAD commands assigned to the numeric keypad keys are disabled until the login is complete.</p>	

2 General CAD Setup

Setting Up CAD Application Parameters

Parameter	Description	Value
cdmdctim	CAD MDC Alert Time	Numeric
	<p>Use the <code>cdmdctim</code> application parameter to determine the maximum amount of time, in seconds, that the Status field on the Unit Status window remains in an alerted (highlighted) state. If this parameter is set to 0 or undefined, Spillman disables the CAD Mobile Status Alerts feature.</p> <p>The default value is blank. To set the <code>cdmdctim</code> application parameter, enter the number of seconds that you want the alert to display.</p>	
cdoffdt	Disallow dispatched unit OFFDT	YES/NO
	<p>Determines the prompt that CAD is to display when a dispatcher tries to change a unit's status to Off Duty (OFFDT) when that unit is still assigned to an active call.</p> <ul style="list-style-type: none"> Set the <code>cdoffdt</code> application parameter to Yes, True, or 1 to have the software display a prompt in the following format: Unit <code>unit#</code> is still attached to call <code>call#type</code>. Unable to log unit off duty. Set the <code>cdoffdt</code> application parameter to the default value (No, False, or 0) to have the software display a prompt in the following format: Unit <code>unit#</code> is still attached to call <code>call#type</code>. Log unit off duty anyway (Y/N)? <N> <p>If the dispatcher clicks No or presses ENTER, the software cancels the status change and returns control to the CAD command line so that the dispatcher can complete the active calls to which the unit is attached.</p> <p>If the dispatcher clicks Yes in response to this prompt, the software changes the unit's status to Off Duty (OFFDT) even though the unit is attached to a call. The default value is No.</p>	
cdoffst	Default officer status	a <code>cdoffst</code> value
	<p>The <code>cdoffst</code> application parameter specifies the default officer status to use when adding records to the <code>cdunito</code> table when the user does not specify the status as part of the RL (Radio Log) command.</p>	
cdoscdf	Default for Onsite Call screen's How Received field	a <code>tbhowrc</code> value
	<p>Sets the code (from <code>tbhowrc</code>) to be used as the default How Received code for onsite Call records that the user adds using the CAD OSC command. If you do not define a value for <code>cdoscdf</code>, the software enters the code O, for "Officer Report," in the How Received field of the Call record.</p>	
cdrcvdr1	Radio log entry with timestamp.	a <code>tb10code</code> value
	<p>Determines if the software creates a timestamp for radio log entries when a call changes from INPUT to RCVD.</p> <ul style="list-style-type: none"> Leave the <code>cdrcvdr1</code> application parameter blank if your agency does not want to create a radio log entry for calls ready to be dispatched. Set the <code>cdrcvdr1</code> application parameter with a custom <code>tb10code</code>. For more information, see "Setting up Radio Log Entries With a Timestamp" on page 103 	

Parameter	Description	Value
cdreclst	Log unit recommend activity	YES/NO
	<p>Determines whether the software logs recommended unit activity. The default value is No.</p> <ul style="list-style-type: none"> Set the cdreclst application parameter to YES to have the software log all recommended units recommended by the software, selected by the user, and dispatched by the user. To access the Recommended Unit Log Backdoor screen, enter cdreclst at the command line. Set the cdreclst application parameter to NO to prevent the software from logging recommended unit activity. 	
cdrecuni	Recommended Units	YES/NO
	For an explanation of this parameter, see “Telling CAD when to display the recommended unit list” on page 139 .	
cdrestim	CAD Disable resetting timer for agency	an apagency value/ALL
	<p>Determines if the status timer for an officer is reset after a query is performed in Mobile.</p> <ul style="list-style-type: none"> Leave the cdrestim application parameter blank to reset the status timer for an officer each time a query is performed in Mobile. Set the cdrestim application parameter with a value from the apagency table to disable resetting the status timer each time a query is performed in Mobile for the officers in an agency. Set the cdrestim application parameter with ALL to disable resetting the status timer each time a query is performed in Mobile for all agencies. 	
cdrucler	Responding Unit Updates Call Incident Codes	YES/NO
	<p>Determines if the software updates the clearance codes of a call’s incident using clearance codes entered from the responsible unit, even if the call and unit are not from the same agency. The default value is NO.</p> <ul style="list-style-type: none"> Set to YES to have the software update the clearance codes of a call’s incident using the clearance codes entered by the responsible unit, even if the call and unit are not from the same agency. For example, if Agency A has an incident and you dispatch a unit from Agency B (that does not have an incident), the software updates the clearance codes from the responsible unit. However, if Agency B has an incident, the software updates the clearance codes of the incident of Agency B. Set to NO to have the software update the incident of the unit’s agency. 	
cdrmsg	CAD radio silence label	alphanumeric
	Sets the text that appears in the upper-right corner of the CAD status screen when radio silence is turned on. The default value is RADIO SILENCE .	
cdruinci	Report agency uses responsible unit	YES/NO
	<p>Determines whether the software updates the incident agency to match the agency of the responsible unit. Used when the oneinci application parameter is set to YES (for more information, see “oneinci” on page 53).</p> <ul style="list-style-type: none"> Set cdruinci to YES to have the software always update the value in the Agency field on the incident record to match the agency of the responsible unit. Set cdruinci to NO to have the software populate the Agency field on the incident record with the agency from the responsible unit. If the responsible unit is changed, the software retains the original agency used when the incident was created. 	

Parameter	Description	Value
<code>cducinced</code>	Incident fields in UC command	BLANK or any combination of dispos , observd , and ccode
	<p>Determines whether dispatchers can include disposition, as observed, and clearance code information when using the UU and UC commands. Do not use commas or other punctuation between the values in <code>cducinced</code> application parameter record.</p> <ul style="list-style-type: none"> Suppose that you set <code>cducinced</code> to: dispos ccode Dispatchers can then include disposition and clearance codes in UU and UC commands. For example, a dispatcher might enter the command UU 101 CMPLT CLO ECV. This command changes the status of unit 101 to CMPLT (complete), changes the disposition of the incident to CLO (closed), and changes the clearance code of the incident to ECV (cleared adult, victim uncooperative). Suppose that you set <code>cducinced</code> to: dispos observd ccode Dispatchers can then include disposition, as observed, and clearance codes in UU and UC commands. For example, a dispatcher might enter the command UU 101 CMPLT CAA AKNF RTF. This command changes the status of unit 101 to CMPLT (complete), changes the disposition of the incident to CAA (cleared adult, arrest), changes the as observed code to AKNF (assault with a knife), and changes the clearance code of the incident to RTF (report to follow). <p>Dispatchers must enter the values in the same order you used in the <code>cducinced</code> application parameter. Because only the Law Incident screen uses the <code>ccode</code> value, Spillman Technologies recommends that you place this value last. By default, <code>cducinced</code> is blank.</p>	
<code>cdxpsdsp</code>	CAD Cross-Pos Display	TRUE/FALSE
	<p>This setting allows your agency to display on the dispatcher's CAD status window calls and units from outside a dispatcher's responsibility. Units assigned to calls outside the dispatcher's responsibility can display on both dispatchers' screens. Calls with units outside the dispatcher's responsibility can also display on both dispatchers' screens. For more information, see "Setting up the cdxpsdsp application parameter" on page 58.</p> <ul style="list-style-type: none"> Set to TRUE to enable the software to display units and calls with cross-positional assignment. Set to FALSE to not enable the software to display units and calls with cross-positional assignment. 	
<code>cdznarea</code>	CAD Zone Info to Area	1fe (or any combination of the letters)
	<p>Applies to CAD without Geobase. Determines whether information in the Zone field of the CAD add-call window is transferred to the Area field of the associated Incident record. List the letter of each type of CAD call (law, fire, or EMS) for which Zone information is to be transferred. If your agency has Geobase, you do not need to use <code>cdznarea</code>; Geobase calculates the value for the Area field.</p>	

Parameter	Description	Value
cdzonreq	Zone information required	YES/NO
	<p>Use the cdzonreq application parameter to specify whether a user is required to enter a zone before saving a Call record.</p> <ul style="list-style-type: none"> If you set the cdzonreq application parameter to the default value (NO), the software does not require users to enter a zone before saving a Call record. If you set the cdzonreq application parameter to YES, the software requires users to enter a zone in the Zones field for each call type. Users cannot save a Call record or dispatch a call if a Zones field is left blank. 	
custrot	Customer Rotation Code	a wrrotate value
	Enter the wrecker rotation type code (from wrrotate) that the dispatcher is to enter when a customer requests a wrecker that is not the next in line in a rotation.	
dispatch	Default Dispatch Status	a valid unit status (for example, PAGED or ARRVD)
	Enter the ten-code (from tb10code) that CAD is to assign a unit if the cdrecuni application parameter is not set and the user does not specify the units to dispatch on the CAD command line. If you do not define a dispatch value, the software uses ENRT .	
emactdsp	EMS Incident Active Disposition	an emtbdisp value
	Enter the code (from emtbdisp) to be used as the default active disposition code for EMS Incident records. When a dispatcher updates an active EMS call, this disposition appears in the uc and uu window. The default value is ACT .	
fractdsp	Fire Incident Active Disposition	a frtbdisp value
	Enter the code (from frtbdisp) to be used as the default Active disposition code for Fire Incident records. When a dispatcher updates an active Fire call, this disposition appears in the uc and uu window. The default value is ACT .	
hydrprox	Hydrant search area	YES/NO
	Display Feet column for Hydrant. This parameter works with the water resource table. Set to Yes if you want to see the distance in feet to a water resource from the call when using the (WS) command in CAD.	

2 General CAD Setup

Setting Up CAD Application Parameters

Parameter	Description	Value
hydrradi	Hydrant Radius Search Value	numeric
	<p>Applies to CAD-Geobase and CAD-Response Plans. Defines the geobase radius in which water sources will be found with the Water Source (WS) command. To use this application parameter, your software must use the Fire Records module and have access to water source information. The default value is 3000. The value that you enter depends on how you set up your map, as shown in the following examples.</p> <p>Suppose your agency uses longitude and latitude and you want to search a two-block area, do one of the following:</p> <ul style="list-style-type: none"> • If your scaling factor (gbsfact) is set to 1000000, set hydrradi to 3614. • If your scaling factor (gbsfact) is set to 100000, set hydrradi to 361. <p>Suppose that your agency does not use longitude and latitude and your geobase is set up with a block roughly equal to 100 units. If you want to search a two-block area, set hydrradi to 200.</p>	
lwactdsp	Law incident active disposition	an lwtbdisp value
	<p>Enter the code (from lwtbdisp) to be used as the default active disposition code for Law Incident records. When a dispatcher updates an active Law call, this disposition appears in the uc and uu window. The default value is ACT.</p>	
mutaid	Add mutual-aid limits for one or more agencies	Agency code and number of units
	<p>The mutaid parameter determines the limits for mutual aid. In the Application Parameter Value field, enter the following information for each agency for which you want to set mutual-aid limits:</p> <ul style="list-style-type: none"> • The agency code • The maximum number of units allowed outside the agency's area at any one time • The maximum number of units allowed outside the area in a single dispatch <p>The parameter value can be comma (,), pipe (), or return delimited. For example, enter: SFEM,1,1,SFD,4,1,CHCA,5,1</p> <p>For detailed instructions, see “Limiting Mutual Aid for Recommended Unit Plans” on page 174.</p>	
noasinci	No incident created when assisting	Agency code/ ALL
	<p>Use the noasinci application parameter to specify that the software <i>is not to</i> create an incident when an agency responds to a call outside its area. The software uses the noasinci application parameter when you dispatch a call.</p> <p>In the Application Parameter Value field, enter ALL to apply the parameter to all agencies. Or, enter the agency code for each agency that is to be affected by the parameter. The agency codes can be comma (,), pipe (), or return delimited. For example, enter SFD,SPD,SPED.</p>	
noczinci	No incident created if not responding	Agency code/ ALL

Parameter	Description	Value
	<p>Use the <code>noczinci</code> application parameter to specify agencies for which the software <i>is not to</i> create incidents when a call occurs in the agency's area and the agency <i>does not</i> respond to the call. The software uses the <code>noczinci</code> application parameter when you accept an Add Call record.</p> <p>In the Application Parameter Value field, enter ALL to apply the parameter to all agencies. Or, enter the agency code for each agency that is to be affected by the parameter. The agency codes can be comma (,), pipe (), or return delimited. For example, enter SFD, SPD, SPED.</p> <p><i>Note:</i> If the agency of the call zone dispatches a unit to the call, the software will create an incident for that agency, even if its agency code is listed in the <code>noczinci</code> application parameter.</p>	
<code>noinci</code>	No incident created	Agency code/ ALL
	<p>Use the <code>noinci</code> application parameter to specify agencies for which the software <i>is not to</i> automatically create incidents. The software uses the <code>noinci</code> application parameter when you accept an Add Call record or dispatch a unit to a call.</p> <p>In the Application Parameter Value field, enter ALL to apply the parameter to all agencies. Or, enter the agency code for each agency that is to be affected by the parameter. The agency codes can be comma (,), pipe (), or return delimited. For example, enter SFD, SPD, SPED.</p>	
<code>offpost</code>	Post officer radio logs?	YES/NO
	Set <code>offpost</code> to YES to post all radiolog entries to the Officer Radiolog (<code>rlofficr</code>) and the Radio Log table (<code>rlmain</code>). Set <code>offpost</code> to NO to post only those entries created using the CS, UO, and <code>upduo</code> commands. Entries created by these commands are posted to <code>rlofficr</code> . The default value is NO .	
<code>oneinci</code>	Create one incident per call	YES/NO
	<p>Determines whether the software creates only one incident per call or allows multiple incidents. Depending on how the <code>noasinci</code>, <code>noczinci</code>, and <code>noinci</code> application parameters are set up determines which incident is created. In addition, if the <code>oneinci</code> application parameter is set to YES, the software allows only the responsible unit to update a call or unit.</p> <p>Spillman Technologies recommends that you use the <code>noasinci</code>, <code>noczinci</code>, and <code>noinci</code> application parameters to set up your incidents instead of using the <code>oneinci</code> application parameter.</p>	
<code>oscvhinq</code>	Associate on-site call to VHINQ	YES/NO
	<p>Determines whether the software associates on-site calls with vehicle inquiries.</p> <p>Set <code>oscvhinq</code> to YES to associate on-site call with vehicle inquiries. The software performs the vehicle inquiry after the dispatcher adds the on-site call. In the radio log for each on-site call, the vehicle inquiry has the same call number as the on-site call.</p> <p>Set <code>oscvhinq</code> to NO to not associate on-site calls with vehicle inquiries. The software performs the vehicle inquiry before the dispatcher adds the on-site call. In the radio log for each on-site call, the vehicle inquiry does not have a call number. The default value is NO.</p>	
<code>rhgrptyp</code>	Group radio log history for call by type	YES/NO
	<p>Use the <code>rhgrptyp</code> parameter to determine how CAD sorts the Radio Log History records for calls that have more than one call type.</p> <p>Set the <code>rhgrptyp</code> parameter to YES to group Radio Log History records by call type and then order of entry (most recent entry first). Set the <code>rhgrptyp</code> parameter to NO to group Radio Log History records only by order of entry. The default value is NO.</p>	

2 General CAD Setup

Setting Up CAD Application Parameters

Parameter	Description	Value
sepstret	Enables you to define the responses that are visible in CAD	TRUE/FALSE
	Set sepstret to True , to enable the State Returns tab. Enter False , to allow the system to function as it does currently, attaching state returns to call comments and not the State Returns tab. For more information, see “Partitioning state responses in CAD calls” on page 127 .	
unistaff	In the Units table (cdunit), determines whether the Persons Required field is used when the Officers Assigned field contains no records.	TRUE/FALSE
	For determining the required personnel for a unit in a Cross-Staffing Group, when no officers are assigned to a unit, the parameter affects the following: <ul style="list-style-type: none"> Set to True to use the Persons Required field in cdunit to populate the Persons Required field in the Cross-Staffing Groups table (cdxsgpr). Set to False to set the value to 0 in the Persons Required field in the Cross-Staffing Groups table (cdxsgpr). Personnel dispatched with the unit are not counted against the maximum dispatchable personnel for the group. For recommending units for dispatch, when no officers are assigned to a unit, the parameter affects the following: <ul style="list-style-type: none"> Set to True to display the value of the Persons Required field in cdunit in the list of recommended units. The value is also used to determine whether the unit meets the staff requirements specified in the recommended units plan. Set to False to display the number of staff in a unit as 0 in the list of recommended units. For detailed instructions, see “Defining How CAD Determines the Number of Staff Assigned to a Unit” on page 165 .	
unitloc	Display Unit Location	1/0, other values or undefined
	Determines whether the Location/Description field on the CAD Two Column Status Display screen displays the call address or the radio log comment. When the value is set to 1 : <ul style="list-style-type: none"> if the Unit Status is <i>numeric</i>, the Location/Description field displays the last radio log comments for the unit. if the Unit Status is <i>non-numeric</i>, the Location/Description field displays the address of the call to which the unit is assigned, or (if the unit is not assigned to a call) the last radio log comments for the unit. When the value is set to 0 , the Location/Description field displays the address of the call to which the unit is assigned, or (if the unit is not assigned to a call) the last radio log comments for the unit.	
wracmplt	Wrecker Auto Complete	YES/NO
	Determines whether the software automatically completes the wrecker when you close the call. <ul style="list-style-type: none"> Set wracmplt to Yes to have the software auto-complete the wrecker when you close the associated call. When you complete the call, the software searches for active wreckers assigned to the call, updates the wrecker status to INSRV and removes it from WRACTV. Then, it updates the wrecker log and position in the wrecker rotation. Set wracmplt to No to require the dispatcher to complete the wrecker. This setting allows the software to function as in previous versions. 	

Parameter	Description	Value
xfrdcmt	Determines whether CAD call comments are transferred to CAD-generated Law Incident, Fire Incident, and EMS Incident records, and if so, whether to the incidents of all agencies or only particular agencies.	BLANK, FALSE , ALL , or agency code(s)
	<p>If you do not want the software to automatically transfer CAD comments to incident records generated by CAD, leave xfrdcmt blank.</p> <p>To make the software transfer comments to incidents regardless of agency, set xfrdcmt to ALL.</p> <p>To limit the transfer to incidents for particular agencies, enter the agency codes, separated by commas. The software transfers comments if the code that appears in the Agency field of a generated incident record matches an agency code that you specify in the xfrdcmt application parameter record. The codes must be valid values from the Agency code table (apagency).</p> <p>The software transfers the comments when a user closes the call. The comments include those entered in the Info field on the Call screen and those entered using the CC (Call Comments) command.</p>	

Setting Up CAD Environment Variables

You can define and export the following environment variable in the Spillman script or the user's profile, as needed. For information on defining environment variables, see the *Application Setup and Maintenance Manual*.

Use the following table to set up environment variables specific to CAD.

Environment variable	Value
CAD_NO_KILLTIME	Yes/No
<p>Disables the software's KILLTIME feature for the Computer-Aided Dispatch Status screen in the CAD module. When this variable is set up, the software does not log users out of CAD after the period of inactivity specified in the KILLTIME variable.</p> <p>To use the CAD_NO_KILLTIME variable, set the value to Yes. To discontinue using this variable, the variable must be removed. Setting the value to No does not turn the variable off.</p>	
E911DIR	Varies by operating system
<p>Specifies the directory used to import E911 data.</p> <ul style="list-style-type: none"> For UNIX, the value is <i>\$FORCEDIR/cad</i>, where <i>\$FORCEDIR</i> is the directory where the data is stored. For Windows, the value is <i>%Base%\E911</i>, where <i>%Base%</i> is the directory where the data is stored. 	

Defining And Assigning Dispatch Positions

To define dispatch positions and assign these positions to your dispatchers, complete the following steps:

1. Make sure the Agency Codes table (`apagency`) contains a code for each agency to which the software will refer. For instructions on working with the code tables, refer to the *Code Table Setup and Maintenance* manual.
2. Make sure the Zones table (`tbzones`) contains a code for every zone of every agency that uses the software. The zone codes enable the software to recommend units from a nearby zone, if necessary.
3. Define each dispatch position by entering information in the Dispatch Positions table (`cdpos`) as described below.

TIP

If you need to find the length of any field in the table, press HELP (Ctrl+W) at that field.

- At the **Dispatch Position** field, enter a code for the dispatch position, for example, **WC** for west console.
- At the **Description** field, enter a description of the dispatch position, for example, **West Console**.
- For UNIX, if this dispatch position is to automatically print radio log entries as they are entered into Spillman, specify its default radio log printer in the **Radio Log Printer** field. The usual format for printer specifications is `/dev/tty#`, where # is the printer number (for example, `/dev/tty02`). The printer you designate here is used only for automatic radio log printing and must run at 9600 baud. For an explanation of tty numbers, see the application setup and Maintenance manual.
- For Windows, do not enter anything in the **Radio Log Printer** field. This field is ignored.

NOTE

Always have one user available who has Modify privileges to `cdpos`. If the dedicated printer fails, this user must access `cdpos` and clear the printer line for each position. If the printer line is not cleared, any PCs linked to that printer will lock up. When the printer is fixed, the user must reenter the radio log printer information in `cdpos`.

- If the dispatch position is responsible for all zones, do not make any entries for it in the **Zones Responsible For** detail field.
- If the dispatch position is responsible for only some zones, click **Detail** (Ctrl+N) to open the Zones Responsible For detail window. Enter the zones for which the position is responsible, or do a lookup at the **Zone** column to select from a list of valid zones (from the `tbzones` table). In addition to the zones for which the position is responsible, add the “blank” zone by selecting **Add** and clicking **Accept** (Alt+A). The “blank” zone allows the dispatcher to see calls that have no assigned zone. The blank code entry has its own Seq (sequence) number but appears as a blank in the **Zones** column.

NOTE

Adding a “blank” zone is different from not adding a zone.

4. Make sure that the Official Name Codes table (`apnames`) contains a record for each CAD user and that the **UID Login Name** field in each record is filled in.
5. Give each dispatcher/call taker appropriate security privileges in the System Privilege screen. See the *Spillman Security Setup and Maintenance* manual.
6. In the Dispatcher Assignment table (`cdassign`), add a record for each CAD user, assigning that user to a dispatch position:
 - In the **Dispatcher Name** field, enter the user’s name from `apnames`.
 - In the **Dispatcher Position** field, enter a dispatch position from `cdpos`.

Setting up the *cdxpsdsp* application parameter

You must set the `cdxpsdsp` application parameter to have the software display cross-positional calls and units.

Apparam: `cdxpsdsp`

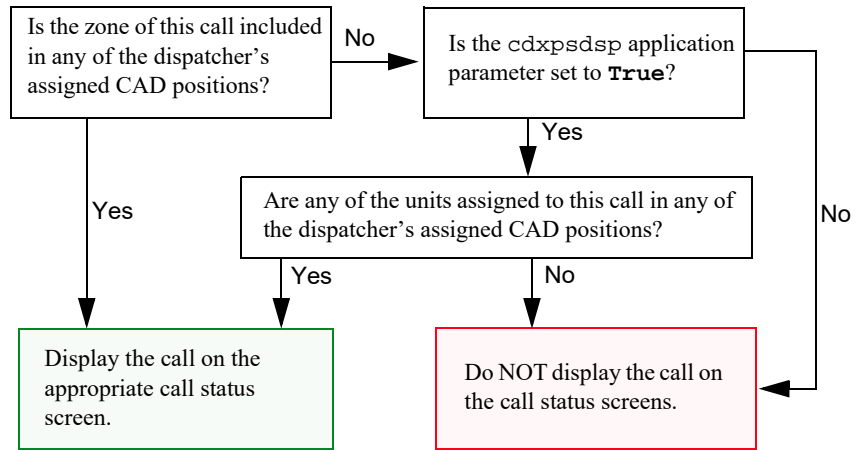
Description: CAD Cross-Pos Display

Values: True/False

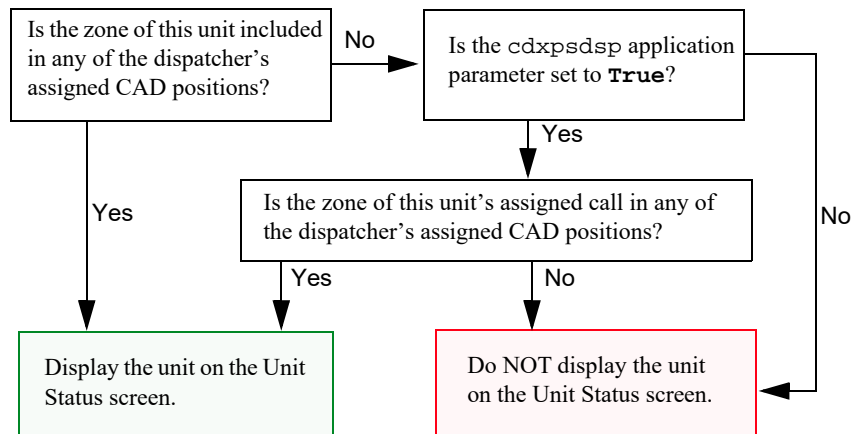
Default Value: False

The software displays calls and units using the following logic.

Cross-positional call display



Cross-positional unit display



Defining Call Natures

When adding a call in CAD, the dispatcher/call taker enters the nature of the call, for example, **Burglary**. Based on the call nature, the software can automatically perform several functions, including the following:

- Entering one or more call types
- Entering a different nature for each call type (law, fire, and EMS)
- Setting a priority for the call
- Displaying an alert to the existence of special instructions associated with the nature
- Entering the offense and condition codes

For the software to recognize the call natures, you must define each call nature in the Nature of Call table (`tbnatur`). Make one entry for each call nature (Traffic Accident, Gas Skip, Heart Attack, and so on).

The **Nature** field in the CAD Add Call screen (and the Call Taker's screen) is coded to `tbnatur`. Therefore, the dispatcher must enter call natures exactly as they appear in the `tbnatur` table. You can give your dispatchers some flexibility, however, by specifying alternate wordings in `tbnatur`. For example, you might have a main code of Abandoned Vehicle with alternate wordings of Abandoned Car, Abandoned Truck, and Car Off Road. Then, dispatchers can enter either the main code or one of its alternate codes.

CAUTION

Set up the `tbnatur` table appropriately the first time, *before* you begin using it on your "Live" system. Adding new natures is relatively easy, *but* you must call Spillman Customer Support if you change even one letter of a nature of call code that has alternate wordings associated with it.

For an explanation of each `tbnatur` field, see the *Code Table Setup and Maintenance* manual. You will also find special considerations for changing a `tbnatur` code once you use it.

Setting up `tbnatur` codes

You can make the software enter a different nature for each of the active calls created. For example, you might set up a nature code to create a law call with the nature `Stabbing` and an EMS call with the nature `Injured Person`. If necessary, the dispatcher can change these values in the Call record.

For a description of each field on the `tbnatur` screen, see the *Code Table Setup and Maintenance* manual.

To add or modify a Nature of Call (`tbnatur`) code:

1. Enter **tbnatur** at the command line. The Nature of Call code table appears.
2. Add a new record or modify an existing record:
 - To add a new record, click the **Add** button.
 - To modify an existing record, search for the nature code that you want to modify and click **Mod**.
3. Move the cursor to the **Send to Mobile** field. You must enter a value in this field even if your agency does not use a mobile software program such as Spillman Mobile.
 - If your agency uses Spillman Mobile or another mobile product, enter **Yes** to allow the user of a mobile unit to use this nature code while entering a CAD call. Enter **No** to prevent your mobile units from using this nature code. The default for this field is **Yes**.
 - If your agency does not use a mobile product, enter **No**.

NOTE

The **Send to Mobile** field also appears on the Law Incident Disposition (`lwtbdisp`) code table and the Unit Status Ten-Codes (`tb10code`) code table. Use the above instructions when adding codes to these code tables.

4. Move the cursor to the **Launch ProQA** field. You must enter a value in this field.
 - If your agency uses the ProQA interface and you want the software to automatically launch ProQA for this nature, enter **Y**.
 - If you do not use ProQA or if you use the ProQA interface and do not want the software to automatically launch ProQA for this nature, enter **N**.
5. Move the cursor to the **Call Type (l,f,e)** field. Enter the call types for this nature code.
6. To make a call type or call types have a different nature from that which appears in the **Nature of Call** field, enter the new nature in the appropriate fields:
 - **Law Nature.** To add a law type call with a different nature, enter that nature in the **Law Nature** field.
 - **Fire Nature.** To add a fire type call with a different nature, enter that nature in the **Fire Nature** field.
 - **EMS Nature.** To add an EMS type call with a different nature code, enter that nature in the **EMS Nature** field.

2 General CAD Setup Defining Call Natures

The following tbnatur record causes CAD to create a law call with the nature Stabbing and an EMS call with the nature Injured Person whenever a user enters Stabbing as the nature of a call.

The screenshot shows the 'tbnatur' application window titled 'Nature of Call Table'. The interface includes a menu bar (File, Edit, Search, Tools, Help) and a toolbar with various icons. The main form is divided into several sections:

- Nature of Call:** A text field containing 'Stabbing'.
- Auto Create Incidents:** A checkbox labeled 'Y'.
- Additional Description:** A text field containing 'Stabbing'.
- Alternate Wordings:** Two text fields containing 'Knife Fight' and 'Knife Attack'.
- Stab Wound:** A text field.
- Default Priority:** A numeric field containing '2'.
- Special Instructions:** A checkbox labeled 'Y'.
- Minutes to Enter:** A numeric field containing '3'.
- Minutes to Assign:** A numeric field containing '3'.
- Minutes to Respond:** A numeric field containing '3'.
- Minutes to Arrive:** A numeric field containing '10'.
- Minutes to Complete:** A numeric field containing '20'.
- Call Type (I,f,e):** A text field containing 'le'.
- Law Offense Code:** A text field containing 'AKNF' with a description '(Assault with a Knife)'.
- Fire Condition Code:** A text field containing ' ' with a description '()'.
- EMS Condition Code:** A text field containing 'STAB' with a description '(Stab Wound)'.
- Law Nature:** A text field.
- Fire Nature:** A text field.
- EMS Nature:** A text field.
- Send to Mobile:** A checkbox labeled 'Y'.
- Launch Call Protocol:** A checkbox.
- Agency:** A text field.
- Allowed in Mobile:** A checkbox.

At the bottom of the window, a status bar displays 'User: sds | Search again to add records to current selection set' and 'OVR Rec 1'.

7. Click **Accept** (Alt+A) to save the record.

Setting Up Incident Creation

The section describes how to set up incident creation for CAD calls.

Avoiding Conflicts Between Incident and Call Record Numbers

You *must* set up the Law, Fire and EMS incident numbers and the CAD Call (cdcall) numbers so that their numbers will never conflict. The absence of conflicting numbers allows users to enter incidents either through CAD or directly at the incident screens. The following types of patterns are recommended for next available record IDs: 98-L00001 for Law Incidents, 98-F00001 for Fire Incidents, 98-E00001 for EMS Incidents and 98-C00001 for CAD Calls. For more information, see the *Application Setup and Maintenance Manual*.

Controlling automatic incident creation by nature

You can use the **Auto Create Incidents** field on the Nature of Call table (tbnatur) to control the automatic creation of incidents for a call with a specific nature.

Auto Create Incidents field →

The screenshot shows the 'Nature of Call Table' (tbnatur) form. The 'Auto Create Incidents' field is highlighted with a black arrow pointing to it from the text 'Auto Create Incidents field' on the left. The form contains various fields for incident creation, including Nature of Call, Additional Description, Alternate Wordings, Default Priority, Special Instructions, Minutes to Enter, Minutes to Assign, Minutes to Respond, Minutes to Arrive, Minutes to Complete, Call Type (I,f,e), Law Offense Code, Fire Condition Code, EMS Condition Code, Law Nature, Fire Nature, EMS Nature, Send to Mobile, Launch Call Protocol, Agency, and Allowed in Mobile.

8. At the command line, enter **tbnatur**.

9. Open the appropriate nature record.
10. In the **Auto Create Incidents** field, do one of the following:
 - Enter **N** to prevent the software from automatically creating incident(s) for calls that use this nature.
 - Enter **Y** to have the software automatically create an incident for calls that use this nature.
11. Click **Accept** to accept your changes.

NOTE

For an incident to be automatically created for an agency associated with a call, the **Auto Create Incidents** field in the Nature record must be set to **Y** and the values in `noinci`, `noczinci`, and `noasinci` must not restrict incident creation for this agency.

Restricting the Automatic Creation of CAD Call Incidents

Spillman provides flexibility for defining the conditions under which the software creates incidents from CAD calls. If the value in the **Auto Create Incidents** field on the `tbnatur` screen does not prevent the software from creating an incident, the software normally creates an incident for the call zone agency and any other agencies that have units dispatched to the call. To modify this default behavior, you can use the following application parameters to set up the software to *restrict* the automatic creation of incidents for specific agencies.

- `noinci` (No automatic incident creation)
- `noczinci` (No incident creation for the agency of the call zone)*
- `noasinci` (No incident creation for assisting agencies)

- `oneinci` (Only one incident created per call)

NOTE

If an agency has units dispatched to a call, then an incident will be created for that agency even if the agency is listed in the `noczinci` application parameter record.

If your agency sets up the software to only create one incident per call (`oneinci`), then the incident that is created depends on how you set the `noinci`, `noczinci`, and `noasinci` application parameters. Therefore, it is recommended to not use the `oneinci` application parameter. Use the `noinci`, `noczinci`, and `noasinci` application parameters for all automatic incident creation.

The `noinci`, `noczinci`, and `noasinci` application parameters replace the `multinci` and `callinci` parameters found in previous versions of CAD.

The `oneinci` application parameter determines whether the software allows multiple incidents per CAD call, or only one incident. The `oneinci` application parameter works in conjunction with the `noinci`, `noczinci`, and `noasinci` application parameters, which determine when the software creates incidents.

For example, you might set up the software to never automatically create an incident for a specified agency. Or, you might set up the software to never create an incident if an agency responds to a call that is outside its area.

CAUTION

To use CAD, you must do the following:

- In the Units table (`cdunit`), enter an agency for each unit.
- In the Unit Status table (`syunit`), also enter an agency for each unit.
- In the Zones table (`tbzones`), enter an agency for each call zone.

By entering the agency value in the `cdunit`, `syunit`, and `tbzones` tables, you avoid the possibility of having a blank agency value in the incident record.

If the agency of the call zone is not listed in the `noinci` application parameter and you dispatch a unit that is not associated with any agency, the software creates an incident for that unit, using the agency of the call zone.

To set up the software so that dispatchers must enter a dispatch zone before saving an Add Call record, set the `cdzonreq` application parameter to **Yes**.

The `cdruinci` application parameter also works in conjunction with the `oneinci` application parameter (when `oneinci` is set to **YES**) to determine whether the software updates the **Agency** field of the incident to match the responsible unit. When an incident is first created, the software creates the incident with the agency information for the responsible unit. The software uses the `cdruinci` application parameter if the responsible unit is changed. If

`cdruinci` is set to **YES**, the software updates the incident agency information to match the new responsible unit. If `cdruinci` is set to **NO**, the software retains the original agency information.

Understanding how the software creates incidents

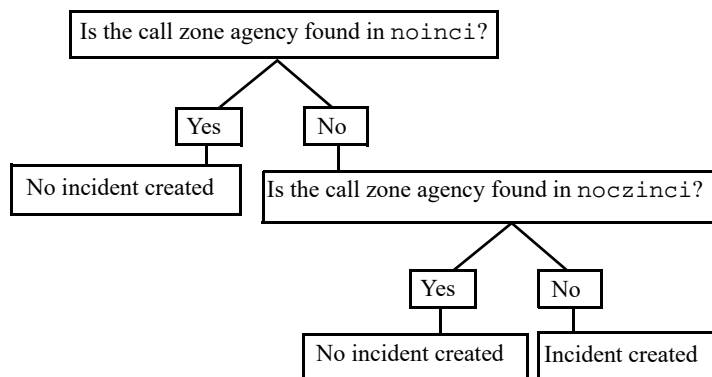
The way the software automatically creates incidents depends on whether you are accepting an Add Call record or dispatching a unit. The following sections describe the two methods the software uses to create incidents.

NOTE

When you accept an Add Call record or dispatch units, the software uses the agency of the call zone, in part, to determine the agencies for which to create incidents. Even if someone later changes the call zone to the zone of a different agency, the software will not create new incidents or delete existing incidents based on the change. The zone change affects the creation of future incidents only.

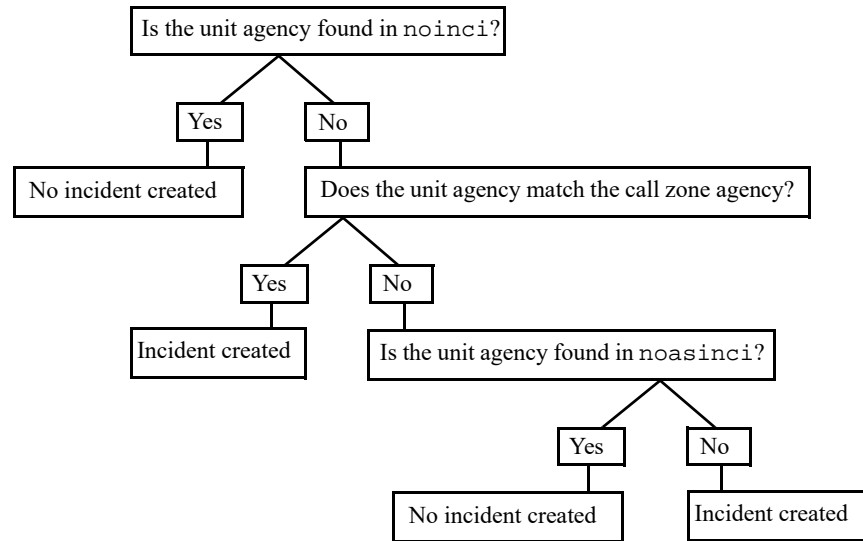
Creating an incident when you accept an Add Call

The following diagram illustrates how the software uses the `noinci` and `noczinci` application parameters when you accept an Add Call record. The software creates an incident for the call zone agency (where indicated) *only* if a unit has not previously been dispatched from this agency.



Creating an incident when you dispatch a unit

The following diagram illustrates how the software uses the `noinci` and `noasinci` application parameters when you dispatch a unit to a call. The software will create an incident (where indicated) *only* if no incident already exists for the unit's agency.

**Understanding how the software generates information for secondary incidents**

In creating the first incident, the software uses the same CAD information that it used in previous versions.

For all incidents created after the first incident, the software:

- Copies all CAD information except the following from the first incident: clearance code, disposition code, disposition date, as observed code, and associated details.
- Creates involvements from the first incident to all additional incidents, so all the records are linked for traceability.
- Adds associated detail records for the responding officers, the offense codes (for law incidents), and the conditions codes (for fire and EMS incidents) after the call is completed. The responsible officer is the same for all incident records for the call.

Defining application parameters to determine how the software creates incidents

Use the following table to define the `noinci`, `noczinci`, and `noasinci` application parameters in the Application Parameters (`apparam`) table. Enter the appropriate value in the **Application Parameter Value** field. If your agency chooses to create only one incident per call, use the `oneinci` application parameter. However, Spillman Technologies does not recommend

using the `oneinci` application parameter. For more information about the `oneinci` application parameter, see [“Setting Up CAD Application Parameters” on page 43](#).

Set this application parameter	To this value	To prevent the software from creating an incident	For
noinci	ALL	For any CAD call	All agencies
	The agency code(s) such as SFD, SPD, SPED		The specified agencies
noczinci	ALL	If a call is assigned to the agency’s zone and that agency does not respond to the call	All agencies
	The agency code(s) such as SFD, SPD, SPED		The specified agencies
noasinci	ALL	If the agency responds to a call outside its area	All agencies
	The agency code(s) such as SFD, SPD, SPED		The specified agencies

Defining the `cdagcyro` application parameter

The `cdagcyro` application parameter allows you to set the software to determine an incident’s responsible officer from the unit that causes the incident to be created (rather than the responsible unit). For more information, see [“cdagcyro” on page 45](#).

The `cdagcyro` application parameter affects the following scenarios:

- **Automated Incident Creation.** An officer attempts to pull over a car for running a stop sign. The suspect flees and the call turns into a pursuit. The pursuit lasts for 30 minutes and involves units from four different agencies. Based on the application parameters of your system, the software creates incidents automatically for each of the four agencies involved. When the `cdagcyro` application parameter is set to **TRUE**, the software uses the primary officer in the unit (or first unit) from the agency to assign as the responsible officer for each incident. Each officer may receive automated workflow emails according to the workflow settings for their agency.
- **Manual Incident Creation.** A domestic in progress call is entered. The primary officer is from the agency of the call, but the assisting officer comes from another agency. This call requires the suspect to be arrested and booked on assault charges. Agency policy requires the assisting officer to fill out a report. The assisting officer radios dispatch to generate a report. Dispatch uses the **GIU** command to generate an incident using the officer’s unit number. The responsible officer of the incident is the primary officer of the unit specified in the **GIU** command. Workflow records may be generated depending on the setup

of the agency. If workflow notification is set up, the assisting officer receives notification of the incident number assigned to him.

- **Incident for Agency of the Call.** A call is entered for a drug deal in progress. No officers from the agency of the call are available. Officers from a neighboring agency are dispatched. The originating agency is set up to create an incident for their agency even though no officers from that agency were dispatched. The responsible officer for the primary agency's incident is the responsible unit for the call.

Setting Up Transfer of Call Comments to CAD-Generated Incidents

Using the `xfrcdcmnt` application parameter, you can eliminate the need for users to retype CAD call comments in Law Incident, Fire Incident, and EMS Incident records generated by CAD calls. If you set up automatic transfer of CAD comments, the software transfers the comments when a user closes a call. Transferred comments include those entered in the **Info** field on the Call screen and those entered using the CC (Call Comments) command.

You can set up the parameter to transfer information for all call-generated incidents or for only those call-generated incidents associated with a particular agency or agencies.

Transfers occur each time a call is closed. This behavior makes possible the automatic transfer of the notes that the software adds when you reopen a call—as well as the transfer of notes manually added to a reopened call.

Transfers also occur when you close calls associated with incidents created from the Call History screen (`cdhist`).

NOTE

To open the Call History screen, display the call record in the Call-Taker's screen (`calls`) and then click **Hist**. To create an incident, click **Inci**.

In the incident record(s), the transferred comments are stored as a supplemental narrative. The **Supplemental** field displays the notification CAD Call info/comments. To view the comments, select the **Supplemental** field and click the **Editor** button.

To set up automatic transfer of comments:

1. On the command line, enter `apparam` to open the Application Parameters table.
2. In the **Application Parameter Name** field, search on `xfrcdcmnt`.

3. When the record for `xfrcdcm` appears, enter **ALL** or agency code(s) in the **Application Parameter Value** field:
 - Enter **ALL** to transfer comments for all call-generated incidents.
 - Enter agency code(s) to transfer comments for a particular agency or agencies. The software transfers comments if the code that appears in the **Agency** field of a generated incident record matches an agency code that you specify in the `xfrcdcm` application parameter record. The codes must be valid values from the Agency code table (`apagency`). Separate each agency code with a comma.
4. Click **Accept** (Alt+A) to save the modified record.

Setting Up Special Instructions

You can use special instructions to provide the following types of information for dispatchers:

- Instructions for any call nature that is defined in the `tbnatur` table. For example, you might set up instructions for handling heart attack calls or questions to ask complainants reporting homicides. The CAD status screen displays a `Y` in the **S** (Special instructions) column for any active call whose nature has special instructions defined.
- Instructions for any other topic.
- Lists of names and phone numbers of judges, special agents, animal control units, and so on.
- Other lists with information for dispatchers, such as ten-codes to be used.

To access specific special instructions, the dispatcher enters a CAD SI command at the CAD status screen. For example:

Entering this command	Might display this information
SI 2e	Special instructions for active call 2e
SI judge	A list of judges' names and phone numbers

You can also make the software cue dispatchers to view special instructions when adding calls of a particular nature. For example, for heart attack calls, you can make the software automatically prompt the dispatcher to view special instructions after the dispatcher enters the call nature.

To make the software prompt the dispatcher to view special instructions, set up instructions in Special Instructions table (`cdspeci`) and put a `Y` in the **Check Special Instructions** field of the related `tbnatur` record.

Fields in the Special Instructions table

Following are explanations of the Special Instructions table fields:

Topic Title

15 characters, alphanumeric field. Enter a key word or phrase to describe the topic to which these instructions apply. This might be the call nature as coded in the Nature of Call table (`tbnatur`).

Special Instructions

Text field. Enter the special instructions here. Click the Lookup button to open the text editor.

Possible Wording

Detail field. Press <NEXT> to open the detail window. Enter all possible wordings for each special instructions topic, including the entry that is in the **Topic Title** field. For special instructions keyed to a call nature, include all alternate wordings for that call nature. For example, for the topic title “Heart Attack,” include “Heart Attack,” “Stroke,” and “Chest Pain.” Then, the dispatcher can display the same special instructions by entering any of these terms.

Description

30 characters, alphanumeric field. An explanation of the possible wording. This is especially useful if the topic is not common. You can also use this field to differentiate between types of reactions, poisons, or injuries.

Setting Up Officer and Unit Information

To make more efficient use of your agency's resources, you can set up units to have multiple primary and secondary functions. If you set up a unit with more than one use, the software can recommend that unit for a greater variety of calls. For example, if a pumper truck has a primary function of pumper and a secondary function of rescue unit, the software can select this unit for recommended unit plans that require either a pumper or a rescue unit.

To help you set up multi-function units, the **Unit Kind** field on the Units screen lets you enter a Public Safety Vehicle code that describes the kind of unit. Each Public Safety Vehicle code has one or more Vehicle Kind Alias codes that specify the functions of the unit. Setting up Unit records involves the following tasks:

- Defining the Alias Kind codes in the Alias Kind code table (tbakaknd). For more information, see [“Defining Alias Kind codes” on page 74](#).
- Defining Public Safety Vehicle codes in the Public Safety Vehicle code table (tbvehknd). For more information, see [“Defining Public Safety Vehicle codes” on page 74](#).
- Defining each unit in the Units table (cdunit). For more information, see [“Defining each unit” on page 81](#).
- If desired, assigning officers to units in the Assign Officers to Units table (upduo). For more information, see [“Assigning officers to units” on page 83](#) and [“Assigning officers to units from the command line” on page 84](#).
- If desired, assigning units to shifts in the Assign Units to Shifts table (updsu). For more information, see [“Assigning units to shifts” on page 87](#).

In addition, the Cross-Staffed units feature can be used to create groups of cross-staffed units when an agency does not have enough personnel to operate all units in its possession at once. For more information, see [“Setting up the Cross-Staffed Units feature” on page 88](#).

Defining Alias Kind codes

Use the Alias Kind Codes table (tbakaknd) to define the alias codes (vehicle uses) that you can assign to Vehicle Kind codes. Following is a sample Alias Kind Code.

For instructions about adding codes, refer to the *Code Table Setup and Maintenance* manual.

Defining Public Safety Vehicle codes

While adding each code (such as **AMB** for Ambulance) in the Public Safety Vehicle Codes table (tbvehknd) you can enter the uses (vehicle kind aliases) to associate with that code. You also indicate whether each use is to be a primary or secondary function. You can also indicate if the vehicle can perform more than one function.

NOTE

Before you define Public Safety Vehicle codes, you must define Vehicle Kind Alias codes. For instructions, see ["Defining Alias Kind codes" on page 74](#).

For example, if you define the Vehicle Kind Alias codes of **PUMP** and **RES** in the Vehicle Kind Alias code table and are entering a Public Safety Vehicle code of **PUMP** for a pumper truck, you can use the Vehicle Kind Alias codes to indicate that the vehicle serves as both a pumper and a rescue unit.

You can make the Public Safety Vehicle code the same as one of the Vehicle Kind Alias codes, but you are not required to do so. For example, you can enter **AMB1** in the **Vehicle Kind** field and enter **AMB** in the **Alias** field. If your agency has ambulances with different primary and secondary functions, set up a Public Safety Vehicle code for each type of ambulance.

In the **Vehicle Kind Alias** detail field, enter one or more Vehicle Kind Alias codes to specify the function(s) of the unit using this Public Safety Vehicle code. If an alias code is the primary function of the unit, enter **Y** (yes) in the **Primary** field. If not, enter **N** (no). You can designate multiple Vehicle Kind Alias codes as the primary or secondary function of a vehicle. You can also set up a Public Safety Vehicle code and designate all Vehicle Kind Alias codes as the primary or the secondary function of the vehicle.

The **Vehicle Kind Alias** field is *not* a required field. However, if you are using the software to recommend units, be aware that the software might use Vehicle Kind Alias codes to sort recommended unit lists and to select units for dispatch. For example, if you add a Public Safety Vehicle code and do not enter any Vehicle Kind alias codes, the software cannot select any unit that uses this Public Safety Vehicle code for a recommended unit plan that specifies unit by kind. (The software can, however, select such a unit if the plan does not specify units by kind. It can also select such a unit to meet other requirements, such as the number of staff.) In general, enter at least one Vehicle Kind Alias code for each Public Safety Vehicle code.

If you do not want to define units with more than one function or if you have certain units that you do not want the software to use when recommending units, leave the **Vehicle Kind Alias** field empty. If you do not use Vehicle Kind Alias codes for any of your units and if you do not want to recommend units, you do not need to set up the Alias Kind Codes table (tbakaknd).

Using custom icons on your CAD map

The Spillman software comes with default icons that appear on your map. Rather than use the default icons, your agency can use custom icons for unit kind, unit type, or call nature. All icons must be in Windows .ico format.

To use custom icons:

1. On your server, open the **Spillman Installation** directory.
2. Open the **Icons** directory. This directory contains a **Default** and a **Custom** folder. The **Default** folder contains all the icons that come with your software.

The location of the Custom CAD Icons is:

\$SPILLMANDIR/icons/custom

3. Copy your custom icons into the **custom** folder.

If you add custom icons, it is recommended to add both a large and a small version for each icon. You must store these in the same .ico file. Spillman Technologies supports 1, 4, 8, 24, and 32 bits per pixel icons.

If you set up large and small icons, only the large icon appears in the Edit Icons window. You might use 48 x 48 for large icons and 24 x 24 for small icons. The software displays the large or small icon on the map depending on how you set up the software. For more information, see [“Determining call and unit icon size” on page 76](#).

Determining call and unit icon size

You can have the map display either large or small call and unit icons.

To determine whether the map displays large or small icons:

1. Select **File > Configure** from the Spillman menu bar. The Configuration screen appears.
2. Click the **Map Settings** tab.
3. Do one of the following:
 - To display large icons on the map, make sure that the **Use Large CAD Icons** option is selected.
 - To display small icons on the map, make sure that the **Use Large CAD Icons** option is not selected.
4. Click **Save** to save your changes and exit the Configuration screen.

Setting up the Clustering function

To use the Clustering function, the following setting must be set up in the Administration Manager (adminutil). This setting also affects the Mobile map. For more information, see the *Mobile Administrator Manual*.

Setting	Description	Value
mapIconClusterRadius	<p>Determines the pixel distance between like icons at which clustering should begin on the map.</p> <p>In the Value field, enter a radius value in pixels for the clustering. For example, to cluster icons within 50 pixels of each other, enter 50. If the value is set to 0, or if the field is left blank, then no clustering occurs. The higher the number, the greater the amount of icons that are clustered under one label. The number of pixels to cluster by does not change as users zoom in or out on the map. By default, no value is set.</p>	Numeric

Setting up concurrent unit functions in the tbvehknd code table

Your agency can set up concurrent functions for unit alias kinds in the tbvehaka detail window on the Public Safety Vehicle Codes screen (tbvehknd).

Concurrent functions are additional kind aliases that can be performed concurrently with the associated alias. Each alias can have up to four concurrent functions. The software searches these fields to determine whether a selected unit can perform additional functionality. This functionality allows your agency to dispatch fewer units to the call.

In the **Concurrent Functions** area of the `tbvehaka` detail window, enter the values that you want the software to use as a concurrent function for the unit alias. When setting up concurrent functions, make sure that the unit can perform all concurrent functions on the same call. For example, a unit that has both extraction and transport capabilities could not perform both functions on the same call. However, that same unit could provide rescue and BLS functions on the same call.

The following screen shows the concurrent functions for several unit alias kinds.

The screenshot shows the `tbvehaka` window with a menu bar (File, Edit, Search, Tools, Help) and a toolbar (Exit, Mod, Add, Del, Back, Fwd, etc.). The main area is titled "Vehicle Kind Alias" and contains a table with the following data:

Seq	Alias	Primary	Concurrent Functions
1	AMB	Y	BLS, ALS
2	TRANS	Y	BLS
3	ALS	N	ALS

At the bottom, there is a status bar with the text "User: sds Add a new detail record" and a button labeled "OVR".

Understanding unit alias kinds and concurrent functions

Because a unit can have alias kinds and concurrent functionality, it is important to understand the difference between them.

Unit alias kind

You can set up multiple alias kinds for a particular unit. You can specify whether the alias has a primary or secondary function. The unit alias indicates that the unit could function as any of the alias types; however, it cannot function as more than one unit type. For example, if you have an ambulance with an alias kind of BLS (basic life support), that unit can fulfill a recommended unit plan or a response plan as an ambulance or a basic life support, but not both.

Unit concurrent function

Concurrent functions are additional kind aliases that can be performed concurrently with the associated alias. Each alias can have up to four concurrent functions. For example, if you have an ambulance with an alias kind of BLS (basic life support) and that alias has concurrent functions of AMB (ambulance) and TRANS (transport), the software can send one unit to fulfill a plan requirement for a BLS, AMB, and TRANS.

Guidelines for setting up concurrent functions for unit aliases

Be aware of the following guidelines when setting up concurrent functions:

- Make sure that the unit can perform all the concurrent functions on the same call. For example, a unit that has both extraction and transport capabilities cannot perform both functions on the same call. However, that same unit can provide ALS and BLS functions on the same call.
- If the software must recommend more units than the recommended unit plan requires to meet the staff requirements, the software recommends the additional units based on the sort values and not the unit kind. The units that the software sends might or might not match the unit kind specified in the recommended unit record.

In addition, concurrent functions can affect the number of people the software sends to a call. For example, suppose your agency has the following recommended unit plan for a PI Accident.

Rotation Type				
Recommended Unit Plan Lists				
Alias	Unit Station	Min Units	Equipment	Min Staff
BLS		1		2
AMB		1		2

If the AMB and BLS requirement can be met with one unit with concurrent functionality, the minimum staff the software requires is 2, not 4.

- The software views all concurrent functions as primary functions after the first recommend.
- Depending on how the `edcfagency` application parameter is set, concurrent functionality for a unit might not apply for agency assists outside of the jurisdiction of the unit.

Reference for the following concurrent function guidelines

Suppose your agency has the following information in the recommended unit plans and concurrent functions specified in the Public Safety Vehicle Codes (tblvehknd) record. In addition, suppose that the COST and PROX sort application parameters are included in the recommended unit sort.

Vehicle kind	Unit Alias	Unit Concurrent functions
RES	BLS	ALS, EXTRI
	ALS	BLS, EXTRI
	EXTRI	ALS, BLS

Unit Operation Cost: \$40,000

Vehicle kind	Unit Alias	Unit Concurrent functions
AMB-B	AMB	BLS
	BLS	AMB

Unit operation cost: \$50,000

- The order in which you enter concurrent functions affects how the software recommends units. The following examples illustrate how the order in which you enter the requested recommended unit record might affect the way the software recommends units.

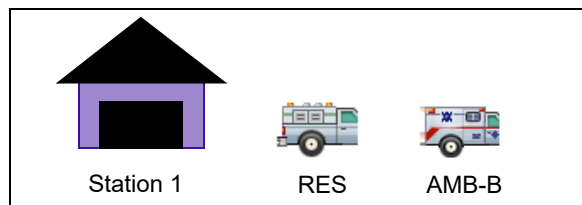
Suppose a dispatcher enters a call with the nature PI Accident and your agency has the following units, station, and recommended unit record.

Rotation Type

Recommended Unit Plan Lists

Alias	Min	Min
Kind	Units	Staff
<input type="text" value="BLS"/>	1	2
AMB	1	2

User: sds | Modify the current record OVR



Because the AMB-B type unit has an alias of AMB with concurrent functionality of BLS, the software sends the AMB-B unit to fulfill both requirements.

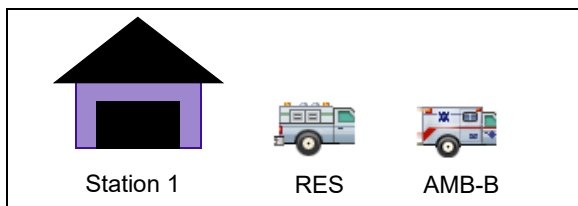
Suppose a dispatcher enters a call with the nature PI Accident and your agency has the following units, station, and recommended unit record.

Rotation Type

Recommended Unit Plan Lists

Alias	Unit Station	Min Units	Equipment	Min Staff
BLS		1		2
AMB		1		2

User: sds | Modify the current record OVR



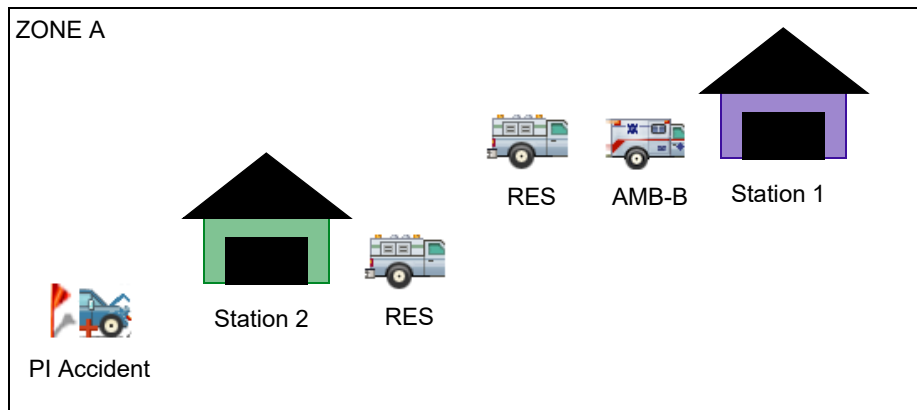
The AMB-B type unit has an alias of AMB with concurrent functionality of BLS. However, because the COST sort application parameter is activated, the software sends the RES unit first because it is cheaper and has an alias of BLS. The software then sends the AMB-B unit to fulfill the AMB requirement. Because of the order in which the units appear in the recommended unit plan, the software sends two units instead of just one—even though the AMB-B unit could have fulfilled both requirements.

- The PROX application parameter always has a higher priority than concurrent unit functionality. The following example illustrates how proximity might affect the way the software recommends units.

Suppose a dispatcher enters a call with the nature PI Accident and your agency has the following units, stations, and recommended unit record.

Rotation Type				
Recommended Unit Plan Lists				
Alias	Unit Station	Min	Equipment	Min
Kind		Units		Staff
AMB		1		2
BLS		1		2

User: sds Modify the current record OVR



The software sends the RES unit (with the alias BLS) from Station 2 to fulfill the BLS requirement and the AMB-B unit (with the alias AMB) from Station 1 to fulfill the AMB requirement. In this situation, the proximity of the call trumps the concurrent functionality of the AMB-B unit.

Defining each unit

Use the following procedure to define individual units:

1. For each unit, add a record in the Units table (cdunit) that defines unit information.

2 General CAD Setup Setting Up Officer and Unit Information

The following illustration shows a sample `cdunit` screen. For an explanation of each field in the `cdunit` table, refer to the “*cdunit*” on page 19.

The screenshot shows the `cdunit` application window titled "Units Table". The interface includes a menu bar (File, Edit, Search, Tools, Help) and a toolbar with various icons. The main area is divided into two sections: "Unit" and "Officers Assigned".

Unit Section:

- Unit Number: 110
- Description: Springfield Police
- Unit Type (L.F.E): 1
- Unit Kind: PATRL
- Display flag: 1 (1=Always, 0=When not ONDT)
- Operation Cost: 0.00
- Persons Required: 1
- Agency: SPD COLLEGE STATION POLICE
- Primary Zone: LNW Law North West Zone
- Contact Method: Radio or Pager
- Station: SPD HQ
- Shift: (empty)
- Equipped With MDC: Y

Officers Assigned Section:

Officer	Stat	Status Change Time	Comment
M George	AA	13:09:17 11/03/00	
		: : / /	
		: : / /	

At the bottom of the window, there is a status bar with the text "User: sds Search again to add records to current selection set" and "OVR Rec 1".

CAUTION

Do not create a unit number that is the same as a CAD command or its abbreviation. If you do, CAD runs the command instead of creating a radio log entry. For example, if you create the unit number “e9” for engine nine and a dispatcher enters **e9 paged**, CAD reads **e9** as the e911 command and the dispatcher must enter **r1 e9 paged** to make an entry in the radio log. For a complete listing of CAD commands, see the online *Help*.

2. Add a `cdunit` record for a unit called CANCEL so that dispatchers can cancel a call without having to assign a unit to it. If dispatchers assign the unit called CANCEL to a call, the software cancels the call without assigning anyone.

3. Enter an RL command to place each unit off duty. Enter the command at the CAD command line, using the following format:

RL unit-code unit-status-ten-code-for-off-duty

For example, if the unit status ten-code for off duty is OFFDT, enter the following command to place unit 1 off duty:

RL 1 offdt

The following message appears the first time you use the RL command for each unit:

```
Warning: unit xx has never been dispatched;  
continue?
```

NOTE

A dispatcher usually can make a radio log entry without beginning the command with the letters RL (for Radio Log). However, the first time a unit is used, the RL command must be used. Using RL now to place units off duty offers two advantages: dispatchers don't need to remember to enter RL the first time they use a unit, and when your agency goes live, all units are listed as off duty until dispatchers place them on duty.

4. Click **OK** or press ENTER.

Assigning officers to units

Use the Assign Officers to Units table (upduo) to change officer unit assignments. This table is like the Units table, except that in upduo the rest of the unit information is display-only. Modifications made at this screen appear in the Units table. You can also assign officers to units from the Spillman command line. For more information, see [“Assigning officers to units from the command line” on page 84](#).

To remove an assigned officer from a unit, follow these steps:

1. Highlight the **Mod** button, and then press SPACEBAR to reveal the field numbers.
2. Type **14** (**Assigned Officer** field), and then press ENTER.
The Officer Assigned detail window appears.
3. Highlight the line containing the officer's name whom you wish to remove.
4. Click the **Del** button, and then press ENTER.

The software prompts: Are you sure you want to delete this record.

5. Click **OK** or press ENTER.

CAUTION

Use the **Rem** button (Remove) with caution. **Rem** removes all officer assignments from the unit record.

Officer assignments can also be changed through CAD.

Assigning officers to units from the command line

You can also assign officers to units from the Spillman command line. You can do this by:

- Using the RL command. See [“Assigning officers to units using the RL command” on page 84.](#)
- Using the UO command. See [“Using the UO command to assign officers to units from the command line” on page 85.](#)

Assigning officers to units using the RL command

The RL (Radio Log) command has been updated to allow dispatch to assign officers to units from the Spillman command line. When used, any officers who are already assigned to the specified unit are removed prior to assigning the new officer(s).

Use the following expanded format for the RL command:

```
{RL} [unit,unit,...] OFICR {officer{:stat}...}
```

The following table explains the RL command format.

Entry	Description
RL	The optional RL (Radio Log) command.
unit,unit,...	Enter one or more units to which you are assigning officers.
OFICR	A new ten-code that specifies officer assignment. OFICR is the default code, but your agency can set up additional codes in the <code>tb10code</code> table. For more information.
officer	The officer that you are assigning to the unit. Assign multiple officers to a single unit by separating them with a space. The entry must match an entry in <code>apnames</code> . If no match is found, the software displays an error and no action is performed for the unit. If an officer designation includes an embedded space (for example, P Foster), you must enter the name in quotes (for example, "P Foster").
:stat	The optional status code that can follow each officer designation. This is the status for the officer in the new <code>cdunito</code> entry. The entry must match a code from the <code>cdoffst</code> table. If you do not specify a status, the software uses the default status (set in the <code>cdoffst</code> application parameter).

TIP

You can remove officer assignments from a unit (and not assign a new officer) by not entering an officer or status. For example, entering **103 OFICR** results in any existing officer assignments being removed from unit 103. The radio log entry displays the description `All officers removed from unit.`

Scenario of assigning an officer to a unit using a radio log entry

Bravo shift has finished their pre-shift briefing. Officers begin to notify dispatch that they are ready to be placed on duty. As each officer radios in, the dispatcher enters a radio log to assign the officer to their respective unit and place them on duty.

For example, the dispatcher enters **10B4 OFICR BJONES** at the Spillman command line. This radio log entry removes any existing officers from unit 10B4 and assigns officer BJONES to the unit. When Officer Jones logs on to Mobile, he does not need to specify unit 10B4 because the association was completed by dispatch.

New radio log entries when assigning officers to units using the RL command

When assigning officers to units using the RL command, a radio log entry is created for each unit. The radio log record contains the following information:

Time/Date: The current time and date

Logged By: The CAD user who entered the command

Unit: The unit for which the radio log entry was entered

Agency: The agency of the unit

Ten Code: The ten-code entered. The default is OFICR

Description: The names of the officers assigned to the unit

Call ID: The call number to which the unit is currently assigned, if any

Zone: The current zone of the unit (from `sycad`)

Shift: The current assigned shift (from `syunit`)

Geobase Coordinates: The current coordinates for the unit (from `syunit`)

Using the UO command to assign officers to units from the command line

You can now use the UO command to assign officers to units directly from the Spillman command line. The functionality from previous versions of Spillman still exists. If you enter only **UO**, the Update a Unit's Officers screen

opens. This command also allows for an optional unit ID. If a single unit is included, the Update a Unit's Officers screen opens with the specified unit loaded.

If you include two or more arguments, the command assigns officers to units using the appropriate radiolog without opening the Update a Unit's Officers screen.

Use the following quick format:

```
UO {unit} {officer{:status}}{,unit
{officer{:status}}}
```

The following table explains the UO command format.

Entry	Description
UO	The Update Officer command.
unit	Enter the unit to which you are assigning officers.
officer	The officer that you are assigning to the unit. Assign multiple officers to a single unit by separating them with a space. The entry must match an entry in <code>apnames</code> . If no match is found, the software displays an error and no action is performed for the unit. If an officer designation includes an embedded space (for example, <code>P Foster</code>), you must enter the name in quotes (for example, <code>"P Foster"</code>).
:status	The optional status code that can follow each officer designation. This is the status for the officer in the new <code>cdunito</code> entry. The entry must match a code from the <code>cdoffst</code> table. If you do not specify a status, the software uses the default status (set in the <code>cdoffst</code> application parameter).

Example 1 Assign a single officer to a unit using an officer ID with embedded spaces:

```
UO 103 "D Gordon"
```

Example 2 Assign multiple officers to a single unit, assigning an alternate status to one officer:

```
UO 103 "B Pratt" DG102:ITT LH104
```

Example 3 Assign multiple officers to multiple units:

```
UO 103 "B Pratt" DG102, 104 LH104, 105 AM105
```

Scenario of assigning multiple officers to multiple units

Dispatch has a copy of the roster for the upcoming Bravo shift. While the officers are in their pre-shift briefing, dispatch assigns the officers to their appropriate units.

For example, the dispatcher enters **UO 10B1 210,10B2 234,10B3 202 256,10B4 188,10B5 221** at the Spillman command line.

This example uses badge numbers to assign the officers to the appropriate units.

Unit	Officer
10B1	210
10B2	234
10B3	202 and 256
10B4	188
10B5	221

The software sets the status for each unit as OFICR. The officers or dispatch can then update their status to ONDT.

Assigning units to shifts

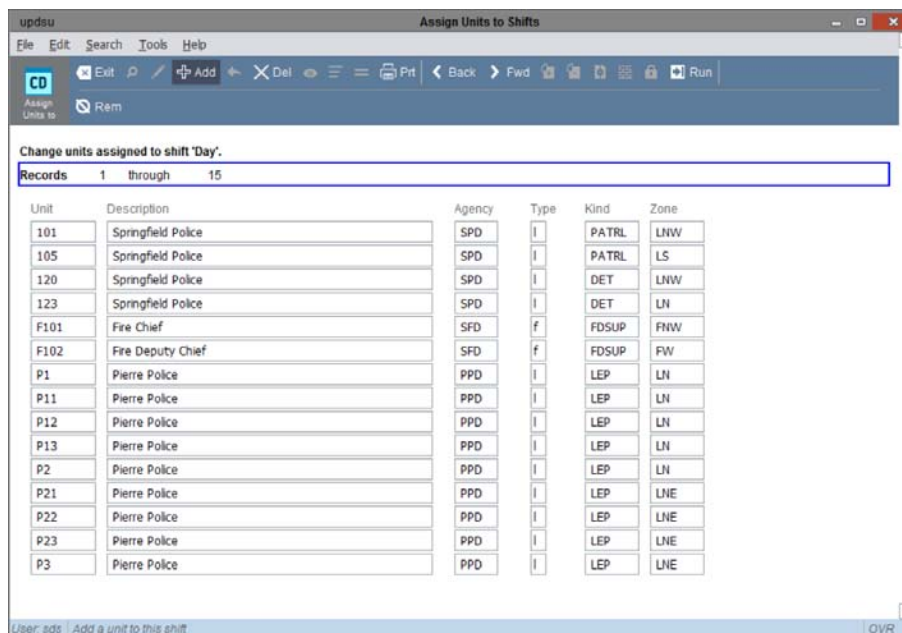
To assign a unit to a shift, follow these steps:

1. Access the Assign Units to Shifts table (updsu).

The software prompts `Enter the shift:`

2. Enter the code of the shift to which you want to assign units. Perform a lookup (Ctrl+E) to view valid shift codes, if needed.

The Assign Units to Shifts screen appears as follows:



- To add a unit to a shift, click the **Add** button. In the Enter the unit number dialog box, enter the unit number (the identifier defined in the **Unit Number** field of the cduunit record) or perform a lookup and select the unit from the list.
- To delete a unit from a shift, highlight the unit and click the **Del** button.

CAUTION

Use the **Rem** button with caution. **Rem** deletes all shift assignments presently displayed.

Shift assignments can also be changed through CAD.

Setting up the Cross-Staffed Units feature

The Cross-Staffed Units feature is used to create and track groups of cross-staffed units. This feature allows users, such as a Dispatch supervisor, to create groups of cross-staffed units when an agency does not have enough personnel at a station to operate all units in its possession at once.

To set up the Cross-Staffed units feature, complete the following:

- [“Setting up module settings” on page 89](#)

- Set the `unistaff` application parameter to the appropriate setting. For more information, see [“Setting Up CAD Application Parameters” on page 43](#).
- [“Modifying the XBSY ten-code” on page 89](#)

Setting up module settings

To use the Cross-Staffed Units feature, the following module setting must be set, and is located in the Administration Manager (`adminutil`) in the **Module.CAD** folder.

Setting	Description	Value
<code>CrossStaffPersonnelInUse</code>	<p>Specifies the ten-codes that use cross-staffing resources when available.</p> <p>Enter the ten-codes that, when used for a unit within a Cross-Staffing group, make the unit available for dispatch, but count the personnel against the maximum number of personnel that can be dispatched. Separate each action code with a comma. By default, the value is blank.</p> <p>Example: Springfield Fire sets the value for the setting to <code>INSRV,ONAIR</code> and has a Cross-Staffing group with unit 1505, an ambulance that requires two personnel, unit 1608, a ladder truck that requires two personnel, and unit 1650, a pumper that requires three personnel. The group has a total of five personnel that can be dispatched at a time. Units 1650 and 1505 are dispatched to a call. The status for unit 1608 is changed to <code>XBSY</code> because there are not personnel available to operate the unit. When the call is finished, units 1650 and 1505 change their status to <code>ONAIR</code>. The status for unit 1608 remains <code>XBSY</code>, because although units 1650 and 1505 are available for calls, their personnel is not available to be dispatched with unit 1608, according to the settings for the agency.</p>	<code>a tb10code</code> Unit Status field value/(blank)

Modifying the XBSY ten-code

By default, the `XBSY` ten-code treats units as if they are not available for dispatch, and units with that status are not included in a list of recommended units. However, the ten-code can be modified to include units with the `XBSY` status in a list of recommended units.

The following table describes the default values for the XBSY ten-code, as defined in the Unit Status Ten-Code table (tb10code).

Field	Value
Unit Status	XBSY
Meaning	Unavailable due to cross-staff
Action	40
Minutes Allowed for Action	0
Is Unit Available	N
Translate to Primary Def	N
Send to Mobile	N
Drive Time Delay in Minutes	0

To modify the XBSY ten-code so units with that status are included in a list of recommended units, in the **Is Unit Available** field, enter **Y**.

Setting Up the TS Command

The Traffic Stop (TS) command lets dispatchers track traffic stops. Depending on your settings and the information entered, when an officer radios in a traffic stop, the dispatcher can use the TS command to:

- Make a radio log entry
- Add a record to the Traffic Stop table
- Perform a Vehicle record query
- Create a Call record

To set up the TS command, complete the following tasks:

- [“Setting up application parameters” on page 91](#)
- [“Setting up system settings” on page 94](#)
- [“Setting the action code and status sequence” on page 96](#)
- [“Setting the RL command to clear a traffic stop and update units” on page 96](#)

Setting up application parameters

The following application parameters affect the TS command. Set the parameters according to your agency’s needs in the Application Parameters table (apparam). For information on other CAD application parameters, see [“Setting Up CAD Application Parameters” on page 43](#).

Parameter	Description	Value
autorc	Create Racial Profile for Traffic Stop	YES/NO
	Determines whether the software creates a Demographic Summary record for each Traffic Stop record. <ul style="list-style-type: none">• To create a Demographic Summary record when a user enters a Traffic Stop record, set the parameter to YES.• To create Demographic Summary records manually, and <i>not</i> when a user enters a Traffic Stop record, set the parameter to NO. The default value is NO.	

2 General CAD Setup Setting Up the TS Command

Parameter	Description	Value
cdtcdft	How Received Value for TC	a tbbhowrc value
	<p>Determines the default How Received code (from tbbhowrc) that is used for traffic stop calls. Depending on how the tsmcall parameter is set, the software enters this code in the How Received field when a dispatcher uses the TS command or the TC command to create a Call record from a traffic stop. The command (TS or TC) that the dispatcher uses depends on the setting of the tsmcall parameter:</p> <ul style="list-style-type: none"> • If tsmcall is set to NO, then the dispatcher can use the TC command. • If tsmcall is set to YES, then the dispatcher can use the TS command. <p>The default value for cdtcdft is O for Officer Report.</p>	
cdtsslv1	Override Default Query Logic	TRUE/FALSE
	<p>Determines if the default system logic for StateLink searches is overridden.</p> <ul style="list-style-type: none"> • To send a request for StateLink returns through Spillman, and to send a request for local searches to Mobile, set the value to TRUE. • To bypass sending queries through Spillman, and to send a request to Mobile for both StateLink and local searches, set the value to FALSE. <p>By default, this parameter is not set, and the method used to send StateLink queries is based on the compatibility of your system. If your system is compatible, then StateLink and local queries are sent through Mobile. Otherwise, StateLink queries are sent through Spillman, and local queries are sent through Mobile. For more information on setting up StateLink to send queries through Mobile, see your StateLink manual.</p> <p>NOTE: It is recommended to set the cdtsslv1 application parameter <i>only</i> if the default StateLink search settings are not working as desired while performing a traffic stop.</p>	
geots	Geobase Address of TS	YES/CALL/NO
	<p>Determines whether the software uses your agency's geobase to verify addresses that are entered in the Traffic Stop screen and the Traffic Stop table (cdtrstop). This application parameter applies to agencies using the Geobase and Response Plans modules.</p> <ul style="list-style-type: none"> • To validate the traffic stop address as the record is entered, set the parameter to Yes. • To validate the traffic stop address when the call is created, set the parameter to Call. • To <i>not</i> validate the traffic stop address, set the parameter to No. 	
rcoival	Officer's Role in Traffic Stop	tbrcoffi value(s)
	<p>If the autorc parameter is set to create automatic Demographic Summary records, then the rcoival application parameter can be used to specify a default value for an officer's role in a Traffic Stop record. If a value is entered in the parameter, then the value is entered as a detail record in the Officers field. When adding Demographic Summary records, the user can change the value from the default.</p> <ul style="list-style-type: none"> • To define a default value, set the parameter to the desired value from the Officer Involvement Code table (tbrcoffi). • To not specify a default value, leave the parameter blank. 	
tsclear	Clearance Codes for TS	tb10code value(s)

Parameter	Description	Value
	<p>Determines which values can be entered in the Clearance field on the Traffic Stop table (cdtrstop). If a dispatcher uses the RL command to clear a traffic stop and the ten-code that the dispatcher uses is specified in the tsclear parameter, then the ten-code is added to the Clearance field on the related Traffic Stop record. The dispatcher can also manually update the Traffic Stop record and add any value specified in the tsclear parameter in the Clearance field.</p> <p>In the Application Parameter Value field of the apparam record for tsclear, enter one or more ten-codes from tb10code, putting a space between each code. For example, enter VW CIT DUI for verbal warning, citation, and DUI. Because the software is case sensitive, the ten-codes must be entered exactly as they appear in the tb10code table. For information on adding the ten-codes for traffic stops, see “Setting the RL command to clear a traffic stop and update units” on page 96.</p>	
tsmcall	<p>Create a Call from a TS</p> <p>Determines how the TS Command functions.</p> <ul style="list-style-type: none"> To add the traffic stop as an active call and dispatch the unit with an ARRVD status, set the value to YES. To update the unit’s status to TS but not create an active call record, set the value to NO. The default value is NO. <p>For information on the ways the TS command can function, see “Understanding the tsmcall parameter” on page 94.</p> <p>NOTE: If the cdzonreq and tsmcall parameter values are both set to YES, and if an address is entered that cannot be matched to a zone, or if no address has been entered, then the Add A New Call screen opens and a zone can be entered.</p>	YES/NO
tsrladdr	<p>Start RL Desc of TS w/Address?</p> <p>Determines if the street address of the traffic stop is populated at the beginning of the Description field in the Radio Log record, or immediately before any comments at the end of the field.</p> <ul style="list-style-type: none"> To populate the address at the beginning of the Description field, set the value to YES. The address is populated as in the following example: 100 West Center; pl=FASTONE st=UT lptyp=PE Clocked at 65 in a 35 zone To populate the address immediately before any comments at the end of the Description field, set the value to NO. The address is populated as in the following example: pl=FASTONE st=UT lptyp=PE; 100 West Center Clocked at 65 in a35 zone <p>The default value is NO.</p>	YES/NO

Understanding the tsmcall parameter

The TS command can be set up to either create a Call record, or to add a record to the Traffic Stop table without creating a Call record. Use the following table to compare the ways that the TS command can function.

If the tsmcall parameter is set to YES , then the TS command	If the tsmcall parameter is set to NO , then the TS command
<ul style="list-style-type: none"> Queries the local database for matching vehicles, if license plate information is entered. If your agency uses StateLink, then any external databases are also queried. Makes a radio log entry. Adds a record to the Traffic Stop table (cdtrstop). Creates an active call record and dispatches the unit to the call with a status of ARRVD. The call is displayed in the Dispatched Calls window. Use the UU and UC commands to update the unit's status and close the call. 	<ul style="list-style-type: none"> Queries the local database for matching vehicles, if license plate information is entered. If your agency uses StateLink, then any external databases are also queried. Makes a radio log entry. Adds a record to the Traffic Stop table (cdtrstop). Updates the unit's status to TS (traffic stop).

The methods for using the TS command are mutually exclusive. Set up the TS command for the desired behavior, and then train all dispatchers to use the command accordingly.

Setting up system settings

To use the TS command, the following system settings must be set up in the **Module.CAD** folder of the Administration Manager (adminutil).

System Setting	Description	Value
TrafficCallDefaultNature		a tbnatur value
	<p>Determines the nature code (from tbnatur) that CAD can use as the default nature code for traffic stops. This setting can also be set at a World, Agency, Group, or User level. For more information on setting up system settings, see the <i>Application Setup and Maintenance Manual</i>.</p> <p>Depending on how the tsmcall parameter is set, the default nature is populated in the Nature field when a dispatcher uses the TS command or the TC command to create a Call record from a traffic stop. The command used depends on the setting of the tsmcall parameter:</p> <ul style="list-style-type: none"> If tsmcall is set to YES, the dispatcher can use the TS command and the default value is Traffic Stop. If tsmcall is set to NO, the dispatcher can use the TC command and the default value is Traffic Offense. <p>When a default call nature is selected, remember that the nature of the call determines the record's default call type. For example, the nature Traffic Stop has a miscellaneous call type. For more information, see "Defining Call Natures" on page 60.</p>	

System Setting	Description	Value
trafficStopAutoForwardLocalResults		TRUE/FALSE
	Determines if the local returns are automatically forwarded when a query is performed from the CAD Traffic Stop screen. To automatically forward local returns, set the value to TRUE . The default value is FALSE .	
trafficStopDisplayLocalResults		TRUE/FALSE
	Determines if the Mobile Vehicle Search Results screen or the Message Center is displayed after a Vehicle record search is completed. This setting is set at a User level. <ul style="list-style-type: none">To open the Vehicle Search Results screen after a Vehicle record search is completed, set the value to TRUE. The default value is TRUE.To open the Message Center and view the search results in the Local Returns folder, set the value to FALSE.	
trafficStopEntryOrder		PlateFirst, AddressFirst
	Determines the order entry options for license plate and address information submitted in the CAD Traffic Stop screens. To have the order be license plate first, set the value to PlateFirst . To have the order be address first, set the value to AddressFirst .	
trafficStopRunLocalQuery		TRUE/FALSE
	Determines if the Local Vehicle Search feature is enabled in the CAD Traffic Stop screens. For local queries to display in Mobile, this setting must be set to TRUE . The default value is TRUE .	
trafficStopVerifyCallZone		TRUE/FALSE
	Determines if the unit's zone matches the zone of the traffic stop address. If the zone does not match, or if your agency uses the Geobase module and address validation was skipped, then the call screen opens so the correct zone can be set. To verify the unit's zone and open the call screen if the unit's zone and traffic stop address' zone do not match, set the setting to TRUE . The default value is FALSE .	

Setting the action code and status sequence

To use the TS command, make sure that the Unit Status Ten-Codes table (tb10code) contains a record that defines the unit status of a traffic stop, and that the **Action** field in this record contains the value 30. The new ten-code TS must also be added to the default status sequence in the Responding Units Status Order table (cdstatse).

NOTE

For the software to enter a value in the **Clearance** field of the cdtrstop table, the ten-code for the unit's current status must have an action value of 30 or -30. This value is defined in the **Action** field of the tb10code record.

Setting the RL command to clear a traffic stop and update units

If the tsmcall parameter is set to **NO**, then a dispatcher can use the RL command to clear a traffic stop and update the assigned unit's status to on duty (ONDT).

To set the RL command to clear a traffic stop and update the assigned unit's status, complete the following tasks:

- Add a ten-code in the tb10code table for each way that a traffic stop can be cleared, such as a verbal warning or traffic ticket. In the **Action** field, enter the desired status for the unit to have after it is cleared from the traffic stop. For example, enter **-10** for Completed Call. For detailed instructions, refer to [“tb10code” on page 22](#).

Action field →

Unit Status	Meaning	Action	Minutes Allowed for Action	Is Unit Available	Translate to Primary Def	Send to Mobile	Drive Time Delay in Minutes
VW	Traffic, Verbal Warning	-10 Completed Call	0	Y	N		0

User: sds | Modify the current record | OVR Rec 1 of 1

- In the `cdstatse` table, update the default status sequence (the one with no unit kind, nature, or agency specified). Add an entry for each new ten-code, making sure to do the following:
 - In the **Status** field, enter the new ten-code.
 - In the **Becomes** field, enter the desired status for the unit to have after it is cleared from the traffic stop. For example, the status `VW` (verbal warning) might become `ONDT`. For detailed instructions, see [“Setting Status Sequences for Responding Units” on page 177](#).
- Enter the ten-code values in the `tsclear` parameter. For information on the `tsclear` parameter, see [“Setting up application parameters” on page 91](#).

When the `RL` command is used with one of the ten-codes defined for clearing traffic stops, the traffic stop is cleared with the specified clearance code, and the unit’s status is updated.

Setting Up the Demographic Summary Table

To use the Demographic Summary table, complete the appropriate setup tasks. This section describes the tasks in detail.

1. Define codes in the new code tables that are tied to the Demographic Summary table. These code tables let users select codes relevant to Demographic Summary records. For more information, see [“Code tables for demographic summaries” on page 99](#).
2. To create a Demographic Summary record when a user adds a Traffic Stop record, set the `autorc` application parameter to **YES**.
3. If the software is set up to automatically create Demographic Summary records, then to set the software to enter a default value for the officer’s role, set the `rcoival` application parameter to that default value.

Understanding how Demographic Summary records are linked to other records

If your agency is creating Call records from traffic stops, then your Demographic Summary records might be linked to Call records through the Traffic Stop table. This occurs if both of the following apply:

- The `autorc` application parameter is set to **YES**. The software automatically creates a Demographic Summary record when a user adds a Traffic Stop record. The Demographic Summary record is linked to the Traffic stop record.
- The `tsmcall` parameter is set to **YES**. The software automatically creates a Call record when a user adds a Traffic Stop record. The Traffic Stop record is linked to the Call record, and the Call record is linked to the Law Incident record for the traffic stop.

Although there is no direct link between the Demographic Summary and Law Incident records, a user can go from a Demographic Summary record to the Traffic Stop record, from there to the Call record, and from the Call record to the Law Incident record. Therefore, the user can obtain officer information from the Demographic Summary record.

To avoid linking officer information to Demographic Summary records, do one of the following:

To	Do this
Automatically create Call records from traffic stops, <i>not</i> create Demographic Summary records	<ul style="list-style-type: none"> Set the <code>tsmcall</code> parameter to YES Set the <code>autorc</code> parameter to NO Instruct your users to manually add Demographic Summary records without linking them to Traffic Stop records
Automatically create Demographic Summary records from traffic stops, and <i>not</i> create Call records	<ul style="list-style-type: none"> Set the <code>autorc</code> parameter to YES Set the <code>tsmcall</code> parameter to NO

Code tables for demographic summaries

The following table lists the code tables used by the Demographic Summary table. For information about setting up code tables, refer to the *Spillman Code Table Setup and Maintenance* manual.

This code table		Defines codes users can enter in this field	The field contains
tbract	Action Taken	Action	The actions taken by the officer or unit performing the traffic stop. For example, codes such as CVS – Consensual Vehicle Search, DS – Driver Search, and CAN – Canine Drug Search can be created.
tbrage	Age Range	Age (on the main screen and in the Passengers/ Group Members detail window)	Age ranges of persons involved in traffic stops. For example, 5-year age ranges such as 00–04, 05–09, 10–14, and so on, can be created.
tbrcmisc	Miscellaneous	Misc Code	Any relevant information that your agency wants to record. For example, codes such as VEH – Type of Vehicle, VIN – Vehicle ID Number, LAW – Related Law Incident Number, DLN – Driver’s License Number, CONV – Date of Conviction, and FINE – Amount of Fine can be added. The user can enter the specific information, such as the amount of the fine, in the detail window.

This code table		Defines codes users can enter in this field	The field contains
tbrcoc	Outcome	Outcome	The outcome of the traffic stop. For example, codes such as ARST – Arrest, CIT - Citation Issued, WARN - Warning Issued, CTBD – Contraband Found, and IMP – Vehicle Impounded can be created.
tbrcoffi	Officer Involvement	Officer Role (in the Officers Involved detail window)	The officer's role in the traffic stop. For example, codes such as STOP – Officer Making Stop and ASST – Assisting Officer can be added.
tbrcpass	Passenger/Group Member	Relationship (in the Passengers/Group Members detail window)	The person's involvement with the traffic stop. For example, codes such as PASS – Passenger or codes for specific seating positions, such as FC – Front Center, FL – Front Left, RR – Right Rear, BED – Pickup bed, and CMP – Camper can be added.
tbrcrs	Contact	Contact	The reason the person was stopped. For example, codes such as CIC – Citizen Complaint, EQU – Equipment Violation, HAZ – Hazardous Materials, and MOV – Moving Violation can be created.

Setting Up Alarm Codes

Alarm codes are used to populate the nature, address, complainant, contact, and description for a call when a dispatcher adds an Alarm-type call and enters the Alarm ID number. Set up alarm information in the Alarms table (cdalarm). Alarms for frequent callers can also be set up, if desired.

If your agency uses the Spillman Alarm Tracking module, then see the *Spillman Alarm Tracking Manual*.

Alarms table field descriptions

The following describes the fields in the Alarms Table screen.

Alarm Number

Enter the Alarm ID. Any unique combination of alphanumeric characters by which this alarm is identified can be used.

Alarm Description

Enter the description of the alarm. For example, Burglary First Security Bank.

Associated Nature

Enter the nature associated with this alarm, or use the Lookup button (Ctrl+E). This field is coded to the tbnatur table. For a call to be created, the nature entered must be one that creates an l, f, or e type call.

Address

Enter the street address of this alarm. If your agency uses the Geobase module, then the Validate Address window opens. Highlight the correct address, and then click **Select**.

City

Enter the city where this alarm is located. This field is coded to the apcity table. If your agency uses the Geobase module, then this field is populated when the address is validated.

Complainant Numbr

Enter the record number for the complainant's Name record, or click the Lookup button (Ctrl+E) to open the Names table. Search for the desired record, and then click **Use**. In the CAD Alarm Codes screen, the appropriate Name record information is populated when a record is selected.

Contact

Enter a name for the contact.

Telephone

Enter a telephone number for the contact.

Description

Enter a description for the contact, or click the **Editor** button to open the text editor.

Setting up Radio Log Entries With a Timestamp

Your agency can capture the time that a call is available for dispatch. You can set your Spillman software to log the time that a call status changes from INPUT to RCVD.

Your agency can then search for and filter radio logs with timestamps from the Main Radio Log screen.

Setting the *calltime* application parameter

In order to create a radio log entry with a timestamp, you must specify when a call is designated as received (RCVD). You can designate this setting through the *calltime* application parameter.

To set the *calltime* application parameter:

1. Enter **apparam** at the command line.
The Application Parameters Table appears.
2. In the **Application Parameter Name** field, enter **calltime**.
3. Click **Accept** (Alt+A).
4. In the **Application Parameter Value**, enter your agency's specified value for when a call time is set. See [page 45](#) for information on *calltime*.
5. Click **Accept** (Alt+A).

Creating a custom unit status ten-code

By creating a custom Unit Status Ten-Code (*tb10code*), your agency can filter and search entries with a timestamp for when the call was received.

To set a Unit Status Ten-Code:

1. Enter **tb10code** at the command line.
The Unit Status Ten-Codes screen appears.
2. Click **Add**.
3. Enter information into each field as prescribed by your agency. For detailed instructions on entering information in the Unit Status Ten-Codes screen, please refer to "[tb10code](#)" on [page 22](#).

The following is an example.

Unit Status	5150
Meaning	Radio Log Timestamp
Action	0 Status not used by CAD
Minutes Allowed for Action	0
Is Unit Available	Y
Translate to Primary Def	N
Send to Mobile	N
Drive Time Delay in Minutes	0

4. Click **Accept** (Alt+A).

Setting the `cdrcvdr1` application parameter

The `cdrcvdr1` application parameter stores the custom ten-code for radio log entries with a timestamp.

To set the `cdrcvdr1` application parameter:

1. Enter **apparam** at the command line.
The Application Parameters Table appears.
2. In the **Application Parameter Name** field, enter `cdrcvdr1`.
3. Click **Accept** (Alt+A).
4. In the **Application Parameter Value** field, enter the designated ten-code value for the radio log timestamp.

The following is an example.

NOTE

If you leave the `cdrcvdr1` value blank, the software does not create the radio log entry.

Searching for radio log entries with a timestamp

Once the `cdrcvdr1` application parameter is set, you can use the Main Radio Log screen to search for radio log entries.

To search for radio log entries:

1. Open the Main Radio Log screen by using one of the following methods:
 - Enter **radiolog** at the Spillman command line.
 - Enter **ra** at the CAD command line.

2 General CAD Setup

Setting up Radio Log Entries With a Timestamp

The Main Radio Log screen appears.

The screenshot shows the 'Main Radio Log Screen' window. At the top, there is a menu bar with 'File', 'Edit', 'Search', 'Tools', and 'Help'. Below the menu bar is a 'Search for records' section with 'Accept', 'Cancel', and 'Previous' buttons. The main area is titled 'Unit Radio Log' and contains several input fields: 'Time/Date' (with a dropdown), 'Sequence' (checkbox), 'Logged by' (text), 'Unit' (text), 'Agency' (text), 'Ten Code' (dropdown, with an arrow pointing to it from the label 'Ten Code field'), 'Type' (text), 'Description' (text), 'Call ID' (text), 'Type' (checkbox), 'Natr' (text), 'Rptd' (text), 'Law' (checkbox), 'EMS' (checkbox), 'Fire' (checkbox), 'Incidents' (text), 'Zone' (text), 'Shift' (text), and 'Geobase Coordinates' (text). At the bottom, there is a status bar with the text 'User: ads | Tap NEXT to change search type, PREV to restore/clear search data' and 'OVR'.

2. In the **Ten Code** field, enter the ten-code that your agency designated for radio log entries with a timestamp.
3. Click **Accept** (Alt+A).

The software displays the radio log entries with a timestamp. The **Time/Date** field indicates when the call was available for dispatch.

4. If there are multiple search results, you can click the **List** button.

Setting Up Application Cue Cards

Application cue cards can be defined for the fields listed below. For instructions, see the *Application Setup and Maintenance Manual*.

Table	Field Prompt	Key for Accessing Cue Cards
ac window (calls)	Info	cdedesc.comnt

Chapter 3

Additional General CAD Setup

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Introduction

This chapter provides additional setup information for the CAD module.

In addition to the information provided in this manual, some features and tables in the RMS module can also be used in CAD:

- Application cue cards
- Resource table records

For more information, see the *RMS User Manual* and the *Application Setup and Maintenance Manual*.

Recording Personnel Skills

Define each employee's usable skills in the `cdskill` table. Dispatchers can later use the CAD skills search command to obtain a list of persons with a skill needed for a particular situation, such as a hostage situation, a bomb threat, or a domestic situation where the involved parties do not speak English. Usable skills might include Hostage Negotiator, Spanish Speaking, CPR Certified, or Explosives Expert.

1. Set up skill codes in the `tbskill` table. Refer to the *Spillman Code Table Setup and Maintenance* manual.
2. Make sure that the `apnames` table contains a record for each person whose skills you want to record.

The software creates a record in the `cdskill` table for each name that is in `apnames`.

3. To add or modify skills information for a particular employee, go to the `cdskill` table and search for the employee name.
4. Click **Mod** to modify the record.
5. Click **Detail** (Ctrl+N) at the **Skills** detail field to open that field, and add/modify/delete skills for the person. You can do a lookup at the **Skill** column to view the list of skills.

Defining Wrecker Codes and Rotations

Following are the general tasks you perform to define wrecker codes and rotations. To complete each task, refer to the specific instructions later in this section.

1. Define each wrecker company code, and enter company information in the Wrecker Company Codes table (`tbwreck`).
2. Define each wrecker rotation type, including a customer-request type, in the Wrecker Rotation Type Codes table (`wrrotyp`).
3. In the Application Parameters table (`apparam`), define the code for the customer-requested wrecker.
4. In the Wrecker Rotation table (`wrrotate`), set up the wrecker company rotation order for each rotation type. Before doing this, [see “Set up wrecker company rotations” on page 115](#) to learn how your changes might affect each of these.

Understanding how CAD selects next wrecker in rotation

After you set up rotation lists, the software identifies the wrecker companies for each rotation type in a particular order, each pointing to the next one in the rotation, as in:

Wrecker Company **A**
Wrecker Company **B**
Wrecker Company **C**
Wrecker Company **D**
Wrecker Company **E**

The software selects Wrecker Company A for the next towing call because A is at the top of the rotation. Then, the rotation shifts as follows:

Wrecker Company **B**
Wrecker Company **C**
Wrecker Company **D**
Wrecker Company **E**
Wrecker Company **A**

Company A moves to the bottom of the rotation order, and the software selects company B next. The order of the rotation remains the same.

Define each wrecker company

In the Wrecker Company table (tbwreck), define each wrecker company that your agency will use. Follow these steps:

1. In the **Wrecker Code** field, enter an abbreviated code for the wrecker company.
2. Enter the company name in the **Wrecker Company** field.
3. In the **Call Person** fields, enter the names and phone numbers of four contacts at the company. Enter the primary contact in the **Call Person 1** field.
4. Use the **Vendor Number** field as desired for the business license or other official number that your agency recognizes for a valid business.
5. Complete the rest of the fields. They are self-explanatory.

A completed tbwreck record might look similar to the one illustrated:

The screenshot shows a software window titled "tbwreck" with a sub-header "Wrecker Company Codes". The window contains a form with the following fields and values:

Wrecker Code	AAA
Wrecker Company	AAA North Dakota Motor Club
Call Person 1	Joe Pike 555-1234
Call Person 2	Fred Pike 555-1235
Call Person 3	Jon Fowler 555-0110
Call Person 4	Jerry Bowles 555-0023
Address	102 S PINE ST
City, State Zip	Springfield, ND 79134
Vendor Number	
Agency	

At the bottom of the window, there is a status bar that reads "User: zds | Go forward in current setttable" and a "QVR" button on the right.

Define each rotation type

After defining wrecker companies, define each rotation type in the Wrecker Rotation Type Codes table (wrrottyp):

1. Define a separate code for each rotation type. For example, if your dispatch center dispatches for multiple counties, then you might define a separate rotation type for each county.

The screenshot shows the 'wrrottyp' application window titled 'Wrecker Rotation Type Codes'. The interface includes a menu bar (File, Edit, Search, Tools, Help) and a toolbar with various icons. Below the toolbar, there are buttons for 'Exit', 'Srch', 'Mod', 'Add', 'Clr', 'Del', 'List', 'Toll', 'Prt', 'Back', 'Fwd', 'Add', 'Jres', and 'Jtbl'. A sidebar on the left contains 'Wrecker Rotation Type' and 'Use'. The main form area has three fields: 'Rotation Code' with the value 'BC', 'Description' with the value 'Boone County Rotation', and 'Agency' which is empty. At the bottom, a status bar shows 'User: sds | Go forward in current settable' and 'OVR'.

2. Define a “customer request” rotation code that the dispatcher can use when a customer requests a wrecker company that is not next in the rotation order.

The screenshot shows the 'wrrottyp' application window titled 'Wrecker Rotation Type Codes'. The interface is identical to the previous screenshot. The main form area now has 'Rotation Code' with the value 'CR', 'Description' with the value 'Customer Request Wrecker', and 'Agency' which is empty. The status bar at the bottom remains the same.

Identify customer request rotation code in apparam table

In the Application Parameters table (`apparam`), find or add the record for the Customer Rotation Code parameter, `custrot`. In the **Application Parameter Value** field, enter the customer request code you entered in the Wrecker Rotation Type Codes table (`wrrotyp`). The record might look like this:

The screenshot shows a software window titled "Application Parameters Table" with a menu bar (File, Edit, Search, Tools, Help) and a toolbar. The main area contains a form with the following fields:

- Application Parameter Name: `custrot`
- Parameter Description: Customer Rotation Code
- Application Parameter Value: CR

At the bottom of the window, there is a status bar that reads "User: sds Search again to add records to current selection set" and "OVR Rec 1".

When a customer requests a wrecker company that is not next in the wrecker rotation order, the dispatcher enters the customer request code as the rotation type. The software then prompts the dispatcher to enter the name of the desired wrecker company.

Set up wrecker company rotations

For each rotation type except the customer rotation, you must set up a wrecker company rotation order in the Wrecker Rotation table (`wrrotate`). The order in which you add the companies in `wrrotate`, is the order in which they appear in the rotation. However, the rotation order changes as you dispatch and cancel wreckers.

The following illustration shows one rotation entry for the SP (Springfield) rotation type. This entry is for Smitty's Wrecker Service (SMIT):

The screenshot shows the 'wrrotate' application window titled 'Wrecker Rotation Status'. The interface includes a menu bar (File, Edit, Search, Tools, Help) and a toolbar with various icons. The main data entry area contains the following fields:

Rotation Code	SP
Wrecker Code	SMIT
Time/Date of Dispatch	10:36:51 10/19/10
Previous Time/Date	19:42:04 02/20/07

At the bottom of the window, a status bar displays 'User: sds | Go back in current settable' on the left and 'OVR' on the right.

To set up a rotation order, follow these steps:

1. Click the **Add** button to add the first record for a rotation. The cursor rests at the **Rotation Code** field.
2. Enter the code for the rotation type. (This field is coded to `wrrotyp`, which you already set up.)
3. In the **Wrecker Code** field, enter the code for the first wrecker company in that rotation type.
4. Enter another record for the same rotation type, specifying the second wrecker company in the rotation. Continue this process to enter the record for each wrecker in the rotation type.

Occasionally you might need to add a new wrecker company or remove a wrecker company from your rotation. When you delete a record from `wrrotate`, the software closes up that record's place in the current rotation. When you add a record to `wrrotate`, the new wrecker goes to the bottom of current rotation.

Setting up wreckers to auto-complete

You can use the wreckers to auto-complete setting (`wracmplt`) to determine whether the software completes the wrecker's assignment when you close the call. If set to `yes`, the software:

- Searches for active wreckers assigned to the call.
- Updates the wrecker's status to `INSRV` and removes it from `WRACTV`.

- Updates the log and the wrecker's position in the wrecker rotation.

Viewing and changing wrecker call history

You can use the Wrecker Call History table (`wrhistory`) to view, modify, add, or delete wrecker call entries made. Any entries or updates made at the CAD Status screen with the CAD DW or UW commands go into this table.

CAUTION

Be careful when you delete records in the `wrhistory` table. You could erase valid parts of the wrecker call history.

Setting Up the DQA Command

Before a dispatcher can use the DQA Driver's License Alert Inquiry command in CAD, you must set up a ten-code for this command in the `tb10code` table. Otherwise, the following message appears: Radiolog: status unknown for unit. (Last=<name>) Please correct.

Make sure a record exists in the `tb10code` table with the following values

The screenshot shows a software window titled "Unit Status Ten-Codes" with a menu bar (File, Edit, Search, Tools, Help) and a toolbar. The main area contains a form for configuring a unit status ten-code. The fields are as follows:

Unit Status	DAINQ
Meaning	Driver's License Alert Inquiry
Action	29 Driver's License Alert Inquiry
Minutes Allowed for Action	0
Is Unit Available	Y
Translate to Primary Def	N
Send to Mobile	
Drive Time Delay in Minutes	0

At the bottom of the window, there is a status bar that reads: "User: sds Search again to add records to current selection set" and "OVR Rec 1".

This entry also allows dispatch to use the radio log format: `rl [unit] dqa`

Recommending Water Sources

If you have CAD-Geo and CAD-Resp and you have purchased and implemented the Spillman Fire Records Management module, the software can locate and suggest the water source closest to the active call. The dispatcher uses the CAD WS command to find water sources.

To use the water sources feature, you must have the geobase properly implemented and the Water Sources table (water) in Fire Records Management properly set up. For information on setting up the Water Sources table, the *Application Setup and Maintenance Manual*.

Customizing the CAD Keypad

In CAD, the keys on the numeric keypad are programmed with the most commonly used CAD commands. By default, when a keypad key is pressed, the assigned command is populated at the command line without opening the corresponding screen. For example, if the 1 key on the numeric keypad is pressed, then the AC (Add a New Call) command is populated at the command line. To complete the command, add any additional parameters, and then press Enter.

The CAD keypad can be customized to your most commonly used commands, or to use normal keypad functionality.

NOTE

Due to the requirements of the Windows operating system, a CAD command cannot be assigned to the Enter key on the numeric keypad.

When CAD is installed, the following default set of key assignments is already in place:

0 = {goto-command-line}	6 = config2
1 = AC (Add Call)	7 = View
2 = DU (Dispatch Unit)	8 = E9-1-1
3 = UC (Update Call)	9 = SI (Special Instructions)
4 = UU (Update Unit)	- = DW (Dispatch Wrecker)
5 = config1	+ = UW (Update Wrecker)

Customizing the CAD keypad

When programming a keypad key, do any of the following:

- Make the key enter the command only, and then manually enter the command parameters at the command line
- Make the key enter the command *and* open the corresponding screen.

To customize the CAD keypad:

1. From the menu bar, select **File > Configure**, or at the command line, enter **config**.

The Configuration screen opens.

2. Click the **CAD Keypad** tab.

The current keypad setup is displayed.

Spillman Configuration

Connection Appearance **CAD Keypad** CAD Sort Order Map Settings Image Settings General Settings CAD Alerts

Key 0: {goto-command-line}

Key 1: ac

Key 2: du

Key 3: uc

Key 4: uu

Key 5: config1

Key 6: config2

Key 7: vi

Key 8: e911

Key 9: si

Key 10: dw

Key 11: uw

Key 12: dw

Key 13: uw

Restore System Prefs Revert to Last Saved Save Cancel

3. Place the cursor in the field that corresponds to the keypad key to which the CAD command should be assigned.
4. Do one of the following:
 - To make a key enter the CAD command only, enter the new command over the old command.
 - To make a key enter the CAD command and open the corresponding screen, enter the command, followed by **{Enter}**, such as **AC{Enter}**. For a list of valid CAD commands, see the *CAD User Manual*.
 - To use normal functionality for a number on the keypad, delete the entry in the field, and leave the field blank. For example, if you leave the **Key 4** field blank and turn on the Num Lock feature, then pressing the 4 key enters the number 4.
5. Repeat steps 3–4 for other keypad keys as needed.
6. When finished, click **Save** to save your changes.

TIP

To restore settings, click **Restore System Prefs** or **Restore to Last Saved**.

Customizing the CAD Status Windows

When Flex is installed, the CAD screen has a default layout.

The screenshot shows the Springfield Training DB CAD interface. The top menu bar includes File, View, Message Center, CAD Reports, and Help. Below the menu is a toolbar with various icons for navigation and actions. A Command field is present with the text 'All Zones'. The main area is divided into three windows:

- Undispatched Calls window:** Displays a table of calls that have not been dispatched. The table has columns: Call, T, P, Nature, R, S, Address, City, Zone, Stat, Time, Unit, Zone, Time, Stat, Location. The data shows several calls, including an Accident at 3100 VETERANS DR and a Theft at 1001 COLLEGE ST.
- Dispatched Calls window:** Displays a table of calls that have been dispatched. The table has columns: Call, T, P, Nature, R, S, Address, City, Zo..., Stat, Time, Units. The data shows a Fire at 818 SWEETWATER ... and an Accident at 333 S MAIN ST.
- Unit Status window:** Displays a table of unit status. The table has columns: Unit, Zone, Time, Stat, Location. The data shows the status of various units, including E1, E2, E96, E4, S107, 103, S109, 109, 170, 307, 3716, 101, 108, 110, 111, and 130.

The size of the Undispatched Calls, Dispatched Calls, and Unit Status windows can be changed, and the content shown can be customized. For example, columns can be added, removed, or rearranged.

Changes made to the settings in CAD apply to your user name only. Your personal settings are saved on your agency's server in your login file.

For more information on customizing the CAD Status windows, see the *CAD User Manual*.

Setting Up CAD to Use Color Codes

CAD can be set up to color code the values in the Priority (P) field on the CAD Status screen.

Each priority is marked by a specific color. The colors used cannot be changed. Use the following table to determine the priority and its corresponding color.

Priority	Color
1	Red
2	Orange
3	Yellow
4	Light green
5	Medium green
6	Light blue
7	Medium blue
8	Dark blue
9	Purple

In the following example, the calls are sorted by priority. In the **P** column, the 1 is displayed in red, the 2 is displayed in orange, and the 4 is displayed in green. The first Call record in the list is highlighted. However, the calls in your screen might be sorted by a different column, and a different call might be highlighted.

Priority column →

CAD_1 Undispatched Calls (1)										
Call		P	Nature	R	S	Address	City	Zo...	Stat	Ti...
6	e	1	Heart Pr...		Y	123 S MAIN ST	SFD	ES	RC...	3.8...
7	e	1	Abdomin...		Y	100 N CEDAR ST	SFD	EW	RCVD	0.1m
3	f	2	Fire			818 SWEETWAT...	SFD	FS	RCVD	1.0Y
4	l	2	Accident			3100 VETERANS ...	SFD	LS	RCVD	1.0Y
5	l	4	Theft			123 S MAIN ST	SFD	LS	RCVD	4.7H

To use color codes, open the Configuration screen. From the **General Settings** tab, select the **Color Code Call Priorities** check box, and then click **Save**.

**Color Code Call
Priorities** check
box

Spillman Configuration

Connection Appearance CAD Keypad CAD Sort Order Map Settings Image Settings **General Settings** CAD Alerts

☒ Remember Window Positions

☒ **Color Code Call Priorities**

☐ Prompt Before Exiting

☒ Show Thumbnails for Images

☐ Use Standard Cut/Copy/Paste/Select All

☐ Use Insert Mode by Default

☒ Show Today Screen on Startup

☐ Auto Spell Check in Editor

☐ No Auto Correction in Editor

☐ Use Sentryx Keyboard Shortcuts

☐ Use Classic Window Focus (Requires Restart of Application)

Evidence Scanner synchronized folder: C:\Documents and Settings\All Users\My Documents

Restore System Prefs Revert to Last Saved

Save Cancel

List

Max Number of Pages Per Transfer: 2

Max Number of Transfers to Store: 3

Involvements

☐ Show Involvements in a Graph

☒ Show Involvements in a List

Command History

Max Command History to Save: 20

Quick Commands Shortcut

☐ CTRL ☐ ALT ☐ SHIFT Key: 0

Customizing CAD Alerts

CAD alert sounds can be set up for certain events, such as the receipt of a new call or a call timer expiration.

Alerts can be customized in the **CAD Alerts** tab on the Configuration screen. Each event has a different default sound, and can use a visual alert, if desired. For more information on customizing alerts, see the *CAD User Manual*.

Adding Customized Sounds

To add Waveform Audio File Format (.wav) sound files to the software, place them in the **Custom** folder under the **Sounds** folder in your Spillman directory. The sounds are available to users the next time they log in to the software.

To add custom sounds:

1. Navigate to the following directory:
\$SPILLMANDIR\sounds\custom

NOTE

If the **Custom** folder does not exist, then add it within the **Sounds** folder.

2. Add the WAV sound files to the **Custom** folder.
3. Log out of the software, and then log back in.
4. At the command line, enter **CAD** to open CAD and sync the changes to your client.
5. To set the sound in CAD, from the menu bar, select **File > Configure**.
The Configuration screen opens.
6. Select the **CAD Alerts** tab.
7. In the field for the desired alert, select the sound to play from the drop-down list.
8. Click **Save** to save your changes and close the Configuration screen.

Displaying a Prompt if Complainant Name is an Alias

You can set up the CAD module so that it alerts users if they enter an alias name in the **Complainant** field of a Call record.

NOTE

This applies only if your agency's call screens (Add Call, Modify Call, and Call Taker's) are set up to display the **Complainant** name block.

If you set up the alias complainant alert, the following prompt appears when a user enters an alias name in the **Complainant** field:

This is an alias name. Use real name instead (Y/N)?

If you do not set up the alias complainant alert, the prompt does not appear and the software simply accepts the entry of the alias name.

To make the software alert users when they enter an alias name in the **Complainant** field of a call screen, you must employ the `cdcname` and `cdalias` application parameters.

`Cdcname` lets you instruct the software to display the **Complainant** name block on the Add Call screen, the Modify Call screen, and the Call Taker's screen.

`Cdalias` lets you instruct the software to alert users when they enter an alias name in the **Complainant** field of a call screen.

To use the alias complainant feature:

1. If the **Complainant** name block does not appear on your call screens, open the Application Parameters table (`apparam`) and set `cdcname` to **YES**.
2. Also in the `apparam` table, set the `cdalias` application parameter to **YES**.

If `cdalias` is not set or if it is set to **NO**, CAD accepts the entry of the alias name without alerting the user that the name is an alias.

Partitioning state responses in CAD calls

The `sepstret` application parameter allows you to define the responses that are visible in CAD.

Use the following procedure to set the `sepstret` application parameter:

1. In Spillman, open the Application Parameters table by entering **apparam** at the command line.
2. Click the **Add** button.
3. In the **Application Parameter Name** field, enter **sepstret**.
4. In the **Parameter Description** field, enter **State Rtrn from CCmts**.
5. In the **Application Parameter Value** field, enter **True** to enable the **State Returns** tab. Enter **False** to allow the system to function as it did in previous versions attaching state returns to call comments and hiding the **State Returns** tab.
6. Click **Accept** (Alt+A) or press ENTER.

The data is stored in the database in the `cdce911` field. The call comments screen in Spillman is also modified to display a second tab, if the parameter is set.

Agencies may want to work with a Spillman Support Technician to “paint” this field onto some or all of the following screens.

- Call takers screen
- Dispatch calls screen
- Call information screen

NOTE

There are multiple versions of these screens, depending on if your agency uses the complainant block or if you choose to display cross streets. For example, the call takes screen is actually `cdcall`, `cd1call`, `cd2call`, `cd3call`, `cd4call`, or `cd5call`, depending on what the parameters are set to.

Restricting specific users

Administrators may also want to restrict certain users, such as Fire and EMS, from viewing this data. To restrict users from viewing this data, you must set field-level permissions on the `cdce911` field.

For example, from the Sentryx System Privileges screen, set the world permissions for the `cdce911` field to no access, and then add permissions for the Patrol and Dispatch groups to view the `cdce911` field.

To achieve this scenario:

1. Enter **adminutil** at the command line.
2. From the Administration Manager, select the System menu group.
3. Select System Privileges.

The System Privileges screen appears.

4. In the Show Privileges For field, select the appropriate level. In this case, World.
5. In the Add Custom Sypriv field, enter **cdce911.data**.
6. Click **Add Custom Sypriv**.

The software recognizes this as a field and adds it to the list of privileges. This denies access to the World.

7. In the Show Privileges For field, select the appropriate level. In this case, Group.
8. From the drop down, select the group you want to grant access. For example, Patrol.
9. In the Add Custom Sypriv field, enter **cdce911.data**.

10. Click **Add Custom Sypriv**.

The software recognizes this as a field and adds it to the list of privileges, again.

11. Select the appropriate check boxes to grant privileges to the selected group.

Repeat steps 7-11 for each group that you would like to grant access.

12. Click **Save**.

Chapter 4

Setup for Recommend Units

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Introduction

This chapter provides information for setting up the CAD module to recommend units for dispatch.

Setting up a large set of recommended unit plans is time-consuming, and might not be cost-effective for a smaller agency. If your agency does not currently use the software to recommend units, consider using the recommended units functionality on a smaller scale. It only takes a few minutes to set up the software to display a sorted list of recommended units. Even this simple sorted list can increase the efficiency of your dispatchers.

You have the following options for letting your dispatchers select the units to dispatch:

- Let dispatchers manually select units. A dispatcher can select a unit by looking at the **Unit Status** window on the CAD Status screen or by performing a lookup at the **Unit(s)** field on the Dispatch Unit screen. This method requires no additional setup.
- Set up the software to display a list of recommended units. You can display the list when the dispatcher opens the Dispatch Unit screen or when the dispatcher presses Ctrl+N at the **Unit(s)** field on that screen. This section describes how to set up the software to recommend units.
- Create more-detailed recommendations, called “response plans.” Your agency must have CAD-Resp, the Spillman Response Plans module, and the Geobase module to create response plans. For instructions, refer to the online Help.

When setting up the software to recommend units, you can go through one or more of the following levels of setup:

- **Setting up the recommended units lists.** At the first level of setup, you tell the software to recommend units based on type and status. When a dispatcher dispatches a specific type of call, the software displays only units that are suited to the type of call (such as law units for a law call) and that are available for dispatch. You define which statuses or ten-codes make a unit available for dispatch. You also have the option of setting up the software to limit the list to units assigned to the dispatcher’s dispatch position. For instructions, [see “Setting Up Recommended Units Lists” on page 136.](#)
- **Sorting the recommended units lists.** At the second level of setup, you tell the software to sort the list of recommended units. For example, you can sort units based on agency or unit kind. By sorting the list, you make it easier for the dispatcher to select the units to dispatch. However, you are not telling the dispatcher to select specific units in the list. For instructions, [see “Sorting the Recommended Units Lists” on page 141.](#)

- **Selecting recommended units for dispatch.** At the third level, you tell the software to go through the sorted list of recommended units and mark some of the units as most suited for dispatch. When the software selects units, a dispatcher does not have to decide which units to send, and he or she can dispatch the marked units with one keystroke. The dispatcher can override the software's recommendation. For instructions, see [“Setting Up Recommended Unit Plans” on page 155](#).

Determining Your Need to Recommend Units

Before setting up recommended units, review the following to determine the needs of your agency:

- “Option 1: Dispatching without recommending units” on page 132
- “Option 2: Setting up and sorting a recommended units list” on page 132
- “Option 3: Selecting some of the recommended units for dispatch” on page 133
- “Option 4: Creating response plans for various situations” on page 135

Option 1: Dispatching without recommending units

If your agency is small and has few units, dispatchers can manually select the units to dispatch. However, depending on the number of units on duty, the **Unit Status** window or a lookup list might not have room to show all units. Therefore, a dispatcher must scroll through the **Unit Status** window or the list to see all units. The **Unit Status** window and a unit lookup list show all units regardless of call type and list the units according to unit number.

NOTE

The software contains default settings for displaying a list of recommended units based on call type. This list is available by pressing Ctrl+N at the **Unit(s)** field on the Dispatch Units screen. However, this list is not sorted and the settings used by the software are not adapted to the needs of your agency.

Option 2: Setting up and sorting a recommended units list

If your agency is small and you want your dispatchers to always decide which unit(s) to send, set up the software to recommend units without selecting units for dispatch. You can set up a different “recommended unit” list for each type of call (law, fire, EMS, or miscellaneous).

Each list is automatically limited to units that match the call type and that are not already dispatched—or selected for dispatch—to the call.

Within each list, you can control two factors:

- You can limit the list to units for which the dispatcher at that position has responsibility (as defined in `cdpos`).

- You can sort the list by one or more of the following criteria:
 - Agency of unit
 - Station of unit
 - Status of unit
 - Time since unit's last status change
 - Kind of unit
 - Zone of unit
 - Unit with the lowest operation cost

If your agency uses maintains a geobase, then you can also sort the list by the unit's proximity to the call's address. If you have the Quickest Route module, you can sort the list by the unit's drive time to the call.

If your agency has a large number of units, sorting the list of recommended units makes it easier for dispatchers to find suitable units, such as units from a specific agency or of a specific kind. Based on the sort criteria that you define, the software can display the most well-suited units at the top of the list. However, a dispatcher can select any unit on the list.

Option 3: Selecting some of the recommended units for dispatch

After you set up CAD to display recommended units, you can set up the software to select some of the units as most suitable for dispatch to that particular call. The software marks the selected units with an asterisk (*). A dispatcher does not have to follow the recommendations made by the software. However, the dispatcher can dispatch all marked units by clicking **OK** (Ctrl+X).

To set up the software to select units for dispatch, you create a set of recommended unit plans. You create these plans in the Recommended Units table (`recunit`) and each plan defines the criteria that the software uses to select units for a specific call or type of call.

4 Setup for Recommend Units

Determining Your Need to Recommend Units

For example, if a dispatcher receives a call for a structure fire at the restaurant at 105 Park Street, the following `recunit` record causes CAD to recommend one pumper truck, one ambulance, and one patrol unit.

The screenshot shows the 'Recommended Units Table' window. The form contains the following data:

- Rec. Units Number: 122
- Unit Type (lfem): f
- Nature of Incident: Structure Fire
- Determ ID: (empty)
- Street Address: 105 PARK ST
- Call Zone: (empty)
- Agency: (empty)
- Alarm Level: (empty)
- Valid: Day (empty), Start: (empty), End: (empty)
- Rotation Type: (empty)

Below the form is a table titled 'Recommended Unit Plan Lists':

Alias	Unit Station	Min Units	Min Staff
PUMP		1	4
AMB		1	2
LEP		1	2

TIP

To make recommendations based on a specific address, as in the preceding example, your agency must have the Spillman Geobase module. Without the Geobase module, you can only make recommendations based on the call zone or agency.

In accordance with the record shown, CAD's recommendations for the fire call are the same, regardless of the day or time. However, you can create multiple records to vary the recommendations by date and time. For example, you can create one record for a school fire that occurs during school hours and another record for a school fire that occurs after school hours.

Selecting units for dispatch is appropriate if you want CAD to recommend units based on call criteria and you only have one level of response for these calls. Follow these steps to recommend units:

1. Perform all of the setup for Option 2. See [“Option 2: Setting up and sorting a recommended units list”](#) on page 132.
2. Add `recunit` records as needed to recommend units for various situations. Work from most general (for example, how to handle all heart attacks) to most specific (for example, how to respond to a structure fire at a particular address).

For detailed instructions, see [“Setting Up Recommended Unit Plans” on page 155](#).

If your dispatch center is dispatching for multiple agencies and using the software to recommend units, you can define mutual-aid limits. Each agency can limit the number of units to be dispatched outside that agency’s area. You can set the following limits:

- The maximum number of units allowed outside an agency’s area at any one time.
- The maximum number of units allowed outside the agency’s area in one dispatch.

A mutual-aid limit does not prevent a dispatcher from dispatching a unit to a call outside an agency’s area. However, mutual-aid limits affect how the software recommends units.

For detailed instructions, see [“Limiting Mutual Aid for Recommended Unit Plans” on page 174](#).

Option 4: Creating response plans for various situations

If your agency has CAD-Resp, the Spillman Response Plans module, and the Geobase module, you can create response plans for CAD calls. To warrant using response plans, your agency should need multi-level response plans, possibly requiring additional information such as planned mutual aid. To set up response plans:

1. Perform all of the setup for Option 2. See [“Option 2: Setting up and sorting a recommended units list” on page 132](#).
2. Perform some of the setup for Option 3 as needed. See [“Option 3: Selecting some of the recommended units for dispatch” on page 133](#).
3. Set up the Geobase module as described in the Geobase documentation.
4. Set up the Response Plans module as described in the Response Plans documentation.

Setting Up Recommended Units Lists

To set up the software to display recommended units lists, do the following:

- Create an application parameter for each type of recommended unit list that you want to display. You can create a list for each of the following call types: law, fire, EMS, and miscellaneous. See [“Creating an application parameter for each type of recommended unit list” on page 136](#)
- Define the statuses that indicate that a unit is available for dispatch. See [“Defining when a unit is available for dispatch” on page 137](#).
- Indicate when you want the software to display the recommended units list. You can display the list when a dispatcher opens the Dispatch Unit screen, or you can allow the dispatcher to display the list as needed. See [“Telling CAD when to display the recommended unit list” on page 139](#).
- If desired, set up the list to display only those units that match the unit kind requirements for the call. See [“Setting up unit kind restrictions” on page 140](#).

Creating an application parameter for each type of recommended unit list

To set up recommended units lists for one call type:

1. Access the Application Parameters table (apparam).
2. Click the **Add** button.
3. In the **Application Parameter Name** field, enter a value that indicates the type of call for which you want to set up this recommended units list. Use one of the following values.

For this call type	Enter
Law calls	lawsort
Fire calls	firesort
EMS calls	emssort
Miscellaneous calls	miscsort

4. In the **Parameter Description** field, enter a description of the parameter, such as **Sort flags for law incidents**.

5. If you want CAD to display only those units that are assigned to the dispatcher's position, enter **DISP** in the **Application Parameter Value** field.

The field also lets you specify whether CAD is to sort the recommended units. Do one of the following:

- If you do not want to sort the recommended units list, do not enter sort criteria.
 - If you want to sort the recommended units list, enter the sort criteria as described in [“Sorting the Recommended Units Lists” on page 141](#). You do not have to define a sort order when you add the apparam.
6. Click **Accept** (Alt+A) to save the record.

Defining when a unit is available for dispatch

You must indicate to CAD which statuses (ten-codes) signal that a unit is available for dispatch. For each call type (law, fire, EMS, miscellaneous), use either the `tb10code` table or the `cdrustat` table to specify the statuses that indicate that a unit is available for dispatch.

- If you use the `tb10code` table, enter a **Y** in the **Is Unit Available** field for each ten-code that is to allow a unit to be available for dispatch. (Actually, the software considers any value *not equal to N* in this field to be a **Y** value.) When using this method, do *not* include the **STS** (sort by status) value in the related sort parameter (`lawsort`, `emssort`, `firesort`, and `miscsort`). See [“Sorting the Recommended Units Lists” on page 141](#).
- If you use the Recommended Units Status Order table (`cdrustat`), specify the status codes (ten-codes) that are to allow units to be available for dispatch and the order in which those units should be listed for the dispatcher to choose from. CAD will only list units whose current status code is defined in this table. When using this method, you *must* include the **STS** (sort by status) value in the related sort parameter for the type of call.

For example, you might disable (omit) **STS** for the `firesort` and `emssort` parameters and, instead, use the `tb10code` **Is Unit Available** field for fire and EMS calls. Then, you might enable (include) **STS** for the `lawsort` and `miscsort` parameters, using the `cdrustat` status order setup for law and miscellaneous calls.

4 Setup for Recommend Units Setting Up Recommended Units Lists

Following is a sample tb10code record:

The screenshot shows the 'tb10code' application window with the title 'Unit Status Ten-Codes'. The interface includes a menu bar (File, Edit, Search, Tools, Help) and a toolbar with various icons. The main form contains the following fields:

- Unit Status: 24
- Meaning: Assignment Completed
- Action: -10 Completed Call
- Minutes Allowed for Action: 0
- Is Unit Available: Y
- Translate to Primary Def: Y
- Send to Mobile: Y
- Drive Time Delay in Minutes: 0

At the bottom, there is a status bar with the text 'User: sds Search again to add records to current selection set' and 'OVR Rec 1'.

Following is a sample cdrustat record:

The screenshot shows the 'cdrustat' application window with the title 'Recommended Units Status Order'. The interface includes a menu bar (File, Edit, Search, Tools, Help) and a toolbar with various icons. The main form contains the following fields:

- Ten Code Status: CMPLT
- Order in List: 2

At the bottom, there is a status bar with the text 'User: sds Search again to add records to current selection set' and 'OVR Rec 1'.

A sample status order with sample ten-codes follows. Use your own agency's ten-codes. You do not have to start the order with zero (0), nor do the order numbers have to be consecutive.

Ten-code	Order
ONDT	0
INSRV	0
CMPLT	1
RETRN	2

Ten-code	Order
OVIOL	3
BUSY	4
OFFDT	5

The **Ten Code Status** field on the `cdrustat` screen is coded to the `tb10code` code table. In the **Order in List** field, you enter a number indicating the status order of the status code. In CAD, the unit with the lowest status order is listed first. For example, in the preceding sample, ONDT and INSRV each have an order number of 0. Therefore, units whose status currently is either ONDT or INSRV are listed first. (Statuses with the same order number are considered to be at the same level of availability for unit recommendation.)

TIP

Each unit must have a radio log entry before it can appear on the list of recommended units during dispatch. Therefore, after you add the unit (in `cdunit`) and set it up properly, immediately go into CAD and place the unit off duty. Placing the unit off duty creates the necessary radio log.

Telling CAD when to display the recommended unit list

The `cdrecuni` parameter lets you specify whether the recommended unit list is to appear after the dispatcher opens the Dispatch Unit screen or only when the dispatcher presses Ctrl+N at the **Unit(s)** field on that screen. If `cdrecuni` is not set, the list appears automatically.

To set the `cdrecuni` parameter:

1. Access the Application Parameters table (`apparam`), and search for the `cdrecuni` parameter.
2. If the parameter is not already in the Application Parameter table (`apparam`), add it.
3. Indicate whether to display the recommended unit list automatically:
 - To display the list automatically, set the parameter to **YES**.
 - To display the list only at the dispatcher's command, set the parameter to **NO**.

Setting up unit kind restrictions

If desired, the list of recommended units can be set up to display only the units that meet the unit kind requirements for the call. The following module setting affects the Unit Kind Restrictions features and is located in the Administration Manager (`adminutil`) in the **Module.CAD** folder.

Setting	Description	Value
RecUnitsRestrict	<p>Recommends only those units which meet unit alias kind requirements.</p> <ul style="list-style-type: none"> Set to True to recommend only those units that match the unit alias kind requirements specified in the Recommended Unit Plan List area in the Recommended Units screen (<code>recunit</code>). Set to False to recommend units of any kind, if there are not sufficient units available that meet the unit alias kind requirements. By default, the value is <code>False</code>. <p>Example: The Recommended Unit Plan Lists area specifies that two pump trucks and one ladder truck be dispatched to a call. When the software searches for the required number of units that meet the unit alias kind requirements, if the setting is set to <code>True</code>, then only those units that meet the requirements are displayed in the list screen. If the setting is set to <code>False</code>, and only two units meet the requirements, then additional units of any kind are also displayed to meet the minimum units requirement for the call.</p>	True/False

Sorting the Recommended Units Lists

Setting the `lawsort`, `firesort`, `emssort`, or `miscsort` application parameter is a quick and simple way to instruct the software to sort the recommended units list in the order most useful for your agency. Before setting the `lawsort`, `firesort`, `emssort`, or `miscsort` application parameter, use the information in this section to determine which criteria create the best sort order for each call type at your agency.

When you have determined the sort criteria to use, set up the software to sort a list of recommended units by entering the sort criteria in the **Application Parameter Value** field of the `lawsort`, `firesort`, `emssort`, or `miscsort` application parameter. You can do this as you add the application parameter, or you can modify an existing parameter.

You can use any of the following sort criteria in the **Application Parameter Value** field: `AGEN` (agency), `KIND` (alias kind) or `KIND2` (alias kind), `STN` (station), `ZONE` (zone), `STS` (status), `DRIVE` (quickest driving route), `PROX` (proximity), `COST` (unit operation cost), or `TIME` (time since the last status change).

If you want CAD to display only those units that are assigned to the dispatcher's position, you can also enter `DISP` in the **Application Parameter Value** field.

NOTE

You can use the sort criteria to sort the recommended units list without setting up recommended unit plans. However, to use the `KIND`, `KIND2`, or `STN` sort criterion, you must set up recommended unit plans.

The recommended units list displays units according to the sort order that you specify in the sort application parameters. Recommended unit plans do not change the order in which the software lists units.

The dispatcher can select any unit on the recommended units list, regardless of the sort order or the marked recommended unit(s).

When you enter a sort criterion in an application parameter, such as `lawsort`, you are only telling the software to sort by that criterion. You are *not* changing the priority of that criterion in relation to the other criteria. For example, if you enter `STS AGEN KIND`, you get the same sort as if you enter `AGEN KIND STS`.

As you enter sort criteria in the **Application Parameter Value** field, enter each criterion in all capital letters. Use any combination of criteria, entering them in any order, separated by a space.

Omitting a criterion disables it for the specified call type. The criterion will not be considered in sorting the recommended units.

The following sections provide a detailed description of the sort criteria and how CAD sorts recommended units.

Understanding the difference between a matching sort and a value sort

When applying the sort criteria, the software uses either a matching sort or a value sort. The following information defines these sorting methods.

- **Matching sort.** The software sorts units into two groups based on a matching value. First, the software lists those units that match the specified value. Then, it lists all non-matching units. The software uses the matching sort method for the AGEN, KIND, KIND2, STN, and ZONE criteria.

Sort criterion	This unit value	Matches this value
AGEN	Agency	Agency of the call
KIND and KIND2	Alias kind	Alias kind specified in the recommended unit plan
	Primary function	Yes
STN	Station	Station specified in the recommended unit plan
ZONE	Zone	Zone of the call

NOTE

The KIND and KIND2 sort criteria are mutually exclusive. For more information about sort criteria, refer to [“Understanding the sorting priority for sort criteria” on page 144](#) and [“Criteria for sorting the recommended units list” on page 149](#).

Value sort. The software sorts units in order by value. The software uses the value sort method for the STS, DRIVE, PROX, COST, and TIME criteria.

Sort criterion	Sorting value	Sorting order
STS	Status of unit	Lists from lowest to highest, using the status order listed in the Recommended Unit Status Order table (cdrustat).
DRIVE	Shortest driving time	Sorts from the shortest driving time to the longest driving time. Your agency must have the Quickest Route module to use this sort value.
PROX	Proximity of unit to the call	Sorts from the closest to furthest from the call.
COST	Unit operation cost	Sorts from the least expensive operation cost to the most expensive operation cost.
TIME	Time since last status change	Sorts from the longest to shortest amount of time since the last status change.

Understanding how CAD sorts units

This section explains the logic that CAD uses to sort the recommended units list. When entering sort criteria in the **Application Parameter Value** field, it is important to understand how CAD applies each sort criterion. You need to understand the following:

- The sorting priority for each sort criterion.
- How CAD uses the priority of each sort criterion.
- How CAD applies a sort criterion and under what conditions CAD might ignore a sort criterion.

If you intend to set up recommended unit plans, read the section “Setting Up Recommended Unit Plans” in chapter 6 of the *Spillman Application Setup and Maintenance* manual before you define sort criteria. The sort criteria influence which units CAD selects for dispatch.

Understanding the sorting priority for sort criteria

Each sort criterion has a sort priority. The **KIND** and **KIND2** sort criteria affect this sort priority if used with the **STN** or **ZONE** sort criterion.

Both **KIND** and **KIND2** cause the software to sort by alias kind and primary function. The difference is the point at which the primary function criterion is applied.

If you enter the sort criterion **KIND**, the software sorts by the primary function *before* sorting by the unit's station and zone. Suppose you enter the criteria **AGEN**, **KIND**, **STN**, **ZONE**, **STS**, **DRIVE**, **PROX**, **COST**, and **TIME** in the **Application Parameter Value** field of the **lawsort**, **firesort**, **emssort**, or **miscsort** application parameter. The software uses the following sort order.

Sort Priority	Description
1 (highest sort priority)	Matching agency
2	Matching unit alias kind
3	Matching primary function
4	Matching station
5	Matching zone
6	Status order of unit
7	Quickest driving time
8	Proximity of unit to the call
9	Unit operation cost
10 (lowest sort priority)	Time since last status change

If you enter the sort criterion **KIND2**, the software sorts by the primary function *after* sorting by station and zone. Suppose you enter the criteria **AGEN**, **KIND2**, **STN**, **ZONE**, **STS**, **DRIVE**, **PROX**, **COST**, and **TIME** in the **Application Parameter Value** field of the **lawsort**, **firesort**, **emssort**, or **miscsort** application parameter. The software uses the following sort order.

Sort Priority	Description
1 (highest sort priority)	Matching agency
2	Matching unit alias kind
3	Matching station

Sort Priority	Description
4	Matching zone
5	Matching primary function
6	Status order of unit
7	Quickest driving time
8	Proximity of unit to the call
9	Unit operation cost
10 (lowest sort priority)	Time since last status change

NOTE

You must set up the Public Safety Vehicle Codes table (`tbvehknd`) for the `KIND` and `KIND2` sort criteria to function properly. The software sorts using the values from the **Alias** field and the values from the **Primary** field in `tbvehknd`.

For more information about designating a unit's function as primary, defining the vehicle kind, and defining vehicle kind aliases, refer to "Defining Public Safety Vehicle Codes" in chapter 5 of the *Spillman Application Setup and Maintenance* manual.

How CAD uses the priority of a sort criterion

The following example illustrates how the software uses the priority of the sort criteria:

1. When a dispatcher starts to dispatch a call, the software looks for an application parameter for the current call type. For example, if the dispatcher dispatches a fire call, CAD looks for the `firesort` parameter.
2. If the parameter exists, the software finds all units of the specified type whose status indicates that they are available for dispatch.
3. The software then looks for the `DISP` criterion in the **Application Parameter Value** field.
 - If `DISP` is found, the software removes from the list all units that are not the responsibility of the current dispatch position. The software then starts to sort the reduced list as explained in step 4.
 - If `DISP` is not found, the software starts to sort the existing list as explained in step 4.
4. The software looks for the sort criterion `AGEN`, which has the highest sorting priority.

If AGEN is found, the software looks at the Call record to determine which agency is responsible for the call. The software then sorts the units by first listing those units from the agency that matches the agency in the Call record and then listing all units from non-matching agencies.

5. The software continues to go through the list of sort criteria in order of priority. If a specific criterion is found, the software applies that criterion to each of the previously sorted groups. If a criterion is not found, the software looks for the next criterion on the list.

How CAD applies a sort criterion

Suppose you set up the `lawsort` application parameter to sort recommended units by matching agency (AGEN). Because dispatchers often dispatch units from the same agency as the call, CAD applies the AGEN sort criterion by first listing units from the same agency as the call. Therefore, CAD uses the following logic to sort units by agency.

Units from the same agency as the call
Units from all other agencies

The software can determine which agency is responsible for the call by using the zone of the call or, if the call zone is not specified, the agency of the dispatcher. Therefore, the software can always apply the AGEN sort criterion. You can also set up specific sort orders for a specific agency or zone. For more information, see [“Sorting recommended units by zone and agency” on page 151](#).

This is not the case for the KIND, KIND2, and STN criteria. If you enter KIND, KIND2, or STN as a sort criterion, the software looks for a recommended unit plan for the call. If the software does not find a plan or if the plan does not specify a unit alias kind or unit station, it ignores the KIND or STN criterion. (If the plan does not specify a value for a sort criterion, the software cannot apply that criterion.) For example, if a recommended units plan specifies fire engines as the unit alias kind, the software applies the KIND criterion as follows.

Fire engines
All other units

If you want the software to sort recommended units by matching unit alias kind or matching station, you must create recommended unit plans. For a detailed description of how the software applies each sort criterion, refer to “Criteria for sorting the recommended units list.”

If you have set up the software to sort recommended units by `KIND` or `KIND2`, CAD uses the Vehicle Kind Alias codes to determine whether a unit matches the search criteria based on the unit aliases and primary and secondary functions. Setting up units that have more than one use, as described in “Setting Up Officer and Unit Information” in chapter 5 of the *Spillman Application Setup and Maintenance* manual, affects the sorting of units.

Suppose you are using the sort criterion `KIND` and have set up a recommended unit plan that requires three rescue units. You have defined some units to have `RES` as a primary function and other units to have `RES` as a secondary function. When recommending units, CAD lists both types of units for that call and it sorts the units as follows.

Rescue units	Units that have <code>RES</code> as a primary function
	Units that have <code>RES</code> as a secondary function
Units of all other kinds	No sort

This logic ensures that the software first selects those units that have the given Vehicle Alias Kind code as their primary function. In this example, CAD selects units that have `RES` as a primary function before it selects any units that have `RES` as a secondary function.

An example

Suppose you list the sort criteria `AGEN`, `KIND2`, and `ZONE` for law calls. CAD sorts units by matching agency (highest priority), matching unit alias kind, matching zone, and matching primary function (lowest priority). To view sort priorities, refer to “Understanding the sorting priority for sort criteria.”

4 Setup for Recommend Units

Sorting the Recommended Units Lists

The following table illustrates the sorting of law units that results from the preceding record.

Agency	Unit alias kind	Zone	Primary function
Units from the agency of the call	Units with an alias kind matching the unit alias kind named in recommended unit plan	Units from the zone of the call	Primary function
			Secondary function
		Units from non-matching zones	Primary function
			Secondary function
	All other kinds of units	Units from the zone of the call	No sort
		Units from non-matching zones	No sort
Units from all other agencies	Units with an alias kind matching the unit alias kind named in recommended unit plan	Units from non-matching zones	Primary function
			Secondary function
	All other kinds of units	Units from non-matching zones	No sort

Criteria for sorting the recommended units list

The following table describes each sort criterion that you can use to sort the recommended units list. For a list of sorting priorities, see “Understanding the sorting priority for sort criteria.”

Criterion	Flag	What the value does (if defined)
AGEN	Agency of unit	AGEN sorts units as follows: <ol style="list-style-type: none"> Units that match the agency of the call (as defined in the Call record). Units from all other agencies.
KIND or KIND2 NOTE: KIND and KIND2 are mutually exclusive.	Alias kind Primary function	KIND and KIND2 sort units as follows: <ol style="list-style-type: none"> Units that match the unit alias kind defined in the recommended unit plan and match the unit’s primary function. All non-matching units. <p>If you enter the sort criterion KIND, the software sorts by the primary function <i>before</i> sorting by the unit’s station and zone (if the station or zone criterion are defined).</p> <p>If you enter the sort criterion KIND2, the software sorts by primary function <i>after</i> sorting by station and zone (if the station or zone criterion are defined).</p> <p>KIND and KIND2 apply only if you set up the Public Safety Vehicle Codes table (tblvehknd) and the unit alias kind is specified in the recommended unit plan. The software sorts using the values from the Alias and Primary fields.</p> <p>For more information about defining a unit’s primary functions, kind, and aliases, refer to “Defining Public Safety Vehicle Codes” in chapter 5 of the <i>Spillman Application Setup and Maintenance</i> manual.</p> <p>For an explanation of the recommended units feature, refer to “Setting Up Recommended Unit Plans” in chapter 6 of the <i>Spillman Application Setup and Maintenance</i> manual.</p>
STN	Station of unit	STN sorts units as follows: <ol style="list-style-type: none"> Units from the station that matches the station defined in the recommended unit plan. Units from all other stations. <p>This criterion applies only if a station is specified in the recommended unit plan.</p> <p>For an explanation of the recommended units feature, see “Setting Up Recommended Unit Plans” in chapter 6 of the <i>Spillman Application Setup and Maintenance</i> manual.</p>
ZONE	Zone of unit	ZONE sorts units as follows: <ol style="list-style-type: none"> Units that match the zone of the call (as defined in the Call record). Units from all other zones. (Units from other zones are not sorted by zone.)

4 Setup for Recommend Units

Sorting the Recommended Units Lists

Criterion	Flag	What the value does (if defined)
STS	Status of unit	<p>STS sorts units as follows:</p> <p>The software organizes units from “most suitable” (according to status) to “least suitable,” based on the unit’s current status and how that status order is set up in the <code>cdrustat</code> table or <code>tb10code</code> table.</p> <p>Refer to “Setting Up Recommended Unit Plans” in chapter 6 of the <i>Spillman Application Setup and Maintenance</i> manual.</p> <p>The STS sort criterion also acts as a filter to determine which units are included in the recommended units list.</p> <p>For a unit to be included in the recommended units list, the unit must meet one of the following conditions:</p> <ul style="list-style-type: none"> • If the STS sort criterion is defined in the Application Parameter Value field of the <code>lawsort</code>, <code>firesort</code>, <code>emssort</code>, or <code>miscsort</code> application parameter, the unit must have a current status that is defined in the Recommended Units Status Order table (<code>cdrustat</code>). • If the STS sort criterion is not defined in the Application Parameter Value field of the <code>lawsort</code>, <code>firesort</code>, <code>emssort</code>, or <code>miscsort</code> application parameter, the Is Unit Available field of the unit’s <code>tb10code</code> record must have a value not equal to N.
DRIVE	Quickest driving time	<p>DRIVE sorts units as follows:</p> <p>The software sorts unit from the quickest drive time to the call to the longest drive time to the call. The software determines the drive time based on how your agency sets up the ESRI Network Analyst software. Your agency must purchase the Quickest Route module to use the DRIVE sort criterion.</p> <p>If you include the DRIVE value, the software also displays a Drive column on the Recommended Unit list screen. For more information about recommending units using the Quickest Route module, see your Quickest Route module documentation.</p>

Criterion	Flag	What the value does (if defined)
PROX	Proximity of unit to the call	<p>PROX sorts units as follows:</p> <p>The software organizes units from those “closest to the call” to those “furthest from the call.”</p> <p><i>If you have not implemented the Geobase module, do not include PROX in your sort criteria. PROX works only if you have CAD with Geobase or CAD with Geobase and Response Plans.</i></p> <p>In determining proximity, the software uses the exact location of the address if it is available:</p> <ul style="list-style-type: none"> • If the call is at a geobased address, the software can use the exact x,y coordinates of the address as the call location. • If the call is at a non-geobased address for which zone information is available, the software uses the coordinates of the center of the zone as the call location. • If the call is at a non-geobased address for which zone information is not available, the software uses point 0,0 (the central origin point of the agency’s map) as the call location. <p>The software also uses the exact location of the unit if it is available:</p> <ul style="list-style-type: none"> • If your agency uses an Automatic Vehicle Location (AVL) program, the software can use the unit’s actual location. • If your agency does not use an AVL program, the software uses the x,y coordinates from the unit’s <code>syunit</code> record as the unit location. These are the coordinates for the center point of the unit’s zone. Therefore, in this case, PROX actually sorts by the proximity of the unit’s zone, not the proximity of the individual unit.
COST	Unit operation cost	<p>COST sorts units as follows:</p> <p>The software sorts units from the smallest operation cost to the largest operation cost. The cost value comes from the Operation Cost field in the Units table (<code>cdunit</code>).</p> <p>If you include the COST value, the software also displays a Cost column on the Recommended Unit list screen.</p>
TIME	Time since last status change	<p>TIME sorts units as follows:</p> <p>The software organizes units from “longest time without a status change” to “shortest time without a status change.” If you omit the TIME value, the time since the unit’s last status change is not considered.</p>

Sorting recommended units by zone and agency

Your agency can specify recommend sorts by agency or zone or both by using the `lawsort`, `emssort`, `firesort` and `miscsort` application parameters.

If you add agency and zone sorts of recommended units, the software searches for sorts in the following order:

- A sort that matches the zone of the call.
- A sort that matches the agency of the call.

- The standard sort order (a sort not specific to an agency or a zone).

NOTE

- If multiple sort definitions exist for the zone of the call, the software uses the first sort definition for that zone.
- If multiple sort definitions exist for the agency of the call, the software uses the first sort definition for that agency.
- If multiple standard sort definitions exist, the software uses the first standard sort definition in the list.

Adding a zone sort for an incident type

To create a zone sort for an incident type:

1. Open the Application Parameters table (apparam).
2. Click the **Application Parameter Name** field and do one of the following:
 - To create a zone sort for law incidents, search for lawsort.
 - To create a zone sort for ems incidents, search for emssort.
 - To create a zone sort for fire incidents, search for firesort.
 - To create a zone sort for miscellaneous incidents, search for miscsort.
3. Select the **Application Parameter Value** field. The software displays the **Editor** button to the right of the field.
4. Click the **Editor** button. The software opens the text editor window. If a sort order already exists, move to a new line. On the new line, enter the zone sort using the following format:

`Z: [zone code] [sort criterion] {sort criterion} {sort criterion} . . .`

For example, enter:

`Z:LNE AGEN KIND ZONE PROX TIME`
5. Add a new line for each zone sort that you want the software to perform.
6. Click **Accept** to close the text editor window.
7. At the Application Parameters table, click **Accept** to save the sort application parameter record.

Repeat the above steps for each incident type for which you want to add zone sorts.

Adding an agency sort for an incident type

To create an agency sort for an incident type:

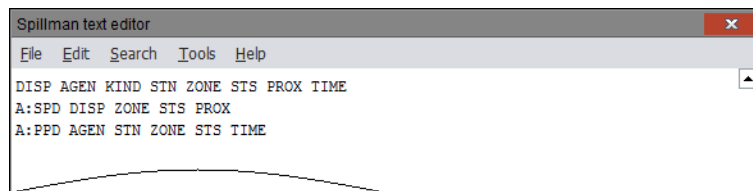
1. Open the Application Parameters table (apparam).
2. Click the **Application Parameter Name** field and do one of the following:
 - To create an agency sort for law incidents, search for lawsort.
 - To create an agency sort for ems incidents, search for emssort.
 - To create an agency sort for fire incidents, search for firesort.
 - To create an agency sort for miscellaneous incidents, search for miscsort.
3. Click on the **Application Parameter Value** field. The software displays the **Editor** button to the right of the field.
4. Click the **Editor** button. The software opens the text editor window. If a sort order already exists, move to a new line. On the new line, enter the agency sort using the following format:

```
A: [agency code] [sort criterion] {sort criterion} {sort  
criterion} . . .
```

For example, enter:

```
A:SPD DISP ZONE STS PROX
```

5. Add a new line for each agency sort that you want the software to perform.



6. Click **Accept** to close the text editor window.
7. At the Application Parameters table, click **Accept** to save the sort application parameter record.
8. Repeat the above steps for each incident type for which you want to add agency sorts.

Guidelines to follow when working with zone and agency sorts

Use the following guidelines when entering values for zone and agency sorts:

- The software does not validate the zone and agency values that you enter in the sort application parameters against the zone and agency values in the `tbzones` or `apagency` table. If the zone or agency code you enter does not match an existing zone or agency code in the software, the software will not use that zone or agency sort.
- Do not use a space between the A or Z, colon (:), and the zone or agency code, for example, **A:SPD**.
- The software allows one default sort per sort parameter. The default sort is the first entry in the **Application Parameter Value** field for each sort parameter.
- If you enter values in the **Application Parameter Value** field that do not start with **Z:** or **A:**, the software assumes that those values belong to the previous line. If the lines contain duplicates, the software ignores the duplicate. For example, in the following sort parameter, the agency sort for SPD is `DISP ZONE STS PROX AGEN STN TIME`.

```
DISP AGEN KIND STN ZONE STS PROX TIME
A:SPD DISP ZONE STS PROX
AGEN STN ZONE STS TIME
```

Setting Up Recommended Unit Plans

After you set up the software to display recommended units, you can create recommended unit plans to make the software select units for dispatch. If the plan's requirements are met, the dispatcher can click **OK** to dispatch all units selected by the software. The dispatcher can select different units than the ones marked by the software.

When you set up recommended unit plans, CAD checks the call type, the call nature, and the address, zone, or agency of the call. Then, it recommends units based on plans that you set up in the Recommended Units table (`recunit`) and on unit information that you supplied in the Units table (`cdunit`).

The following list illustrates the types of information you can enter in the `recunit` screen when setting up recommended unit plans:

- Kind of unit required for the call
- Alarm level for the call
- Station from which unit must come
- Equipment required
- Minimum number of units and staff required

The screenshot shows the 'Recommended Units Table' window in the 'rmain' application. The window has a menu bar with 'File', 'Edit', 'Search', 'Tools', and 'Help'. Below the menu bar is a toolbar with icons for 'Exit', 'Search', 'Mod', 'Add', 'Clr', 'Del', 'View', 'List', 'Totl', 'Prt', 'Back', 'Fwd', 'Jadd', 'Jres', and 'Jtbl'. Below the toolbar is a 'Recommended Units' section with the following fields: 'Rec. Units Number', 'Unit Type (Item)', 'Nature of Incident', 'Determ ID', 'Determinant', 'Street Address', 'City', 'Call Zone', 'Agency', 'Alarm Level', 'Valid', 'Day', 'Start', 'End', 'Rotation Type', and 'Recommended Unit Plan Lists'. The 'Recommended Unit Plan Lists' section includes fields for 'Alias', 'Min', 'Kind', 'Unit Station', 'Units', 'Equipment', and 'Staff'. The status bar at the bottom shows 'User: sds' and 'Search for specific records'.

When CAD displays the recommended units list for the dispatcher, it marks with asterisks the units that are best suited to respond.

When creating a plan, you can complete either the **Units to Recommend** detail field or the **Rotation Type** field. Use **Rotation Type** to base recommendations on unit rotations you set up. For example, use it to rotate wrecker companies for abandoned vehicle calls, or use it to rotate commercial ambulance services for heart attack calls.

Types and categories of recommended unit plans

Each plan must be of a specific type (law, fire, EMS, or miscellaneous) and must fall into one of the categories listed below. The categories encompass plans from “most geographically specific” (at a specific address) to “most geographically general” (anywhere in the jurisdiction).

The following table gives an example of a fire plan for each category. The agency could also have a law, an EMS, and a miscellaneous plan for each category.

Category	Example
1—incident of a specific <i>nature</i> at a specific <i>address</i> (requires geobase)	<i>Nature</i> : confirmed structure fire <i>Address</i> : elementary school at 101 Main Street Two plans. Weekday plan recommends firefighting units, a command unit, enough personnel to evacuate the children and teachers, enough police units to control traffic, and an ambulance to stand by. Night/weekend plan recommends fire units and minimum traffic control.
2—any incident at a specific <i>address</i> (requires geobase)	<i>Address</i> : home of an elderly person who is on oxygen and in a wheelchair Plan recommends a pumper truck, a rescue truck, and an ambulance.
3—incident of a specific <i>nature</i> in a particular <i>zone</i>	<i>Nature</i> : grass fire <i>Zone</i> : FZ4, off-road terrain farms and fields Plan recommends enough units to fight a grass fire, including multiple 4-wheel drive pumpers and rescue trucks, plus enough people to fight the fire along its line.
4—any incident in a particular <i>zone</i>	<i>Zone</i> : FZ4, off-road terrain with farms and fields Plan recommends a 4-wheel drive pumper and a rescue truck, to evaluate the scene.
5—incident of a specific <i>nature</i> and for a specific <i>agency</i>	<i>Nature</i> : cat in tree <i>Agency</i> : GCFD Plan recommends a ladder truck unit.

Category	Example
6—any incident for a specific <i>agency</i>	<i>Agency:</i> GCFD For any call not covered by any of the above categories, this plan recommends an exploratory response with at least one pumper truck and a rescue unit.
7—incident of a specific <i>nature</i> anywhere in the jurisdiction(s)	<i>Nature:</i> gas leak Plan recommends a rescue truck that has gas-detection equipment.
For any plan (any type and category), you can also define days of week and times of day during which the plan applies.	

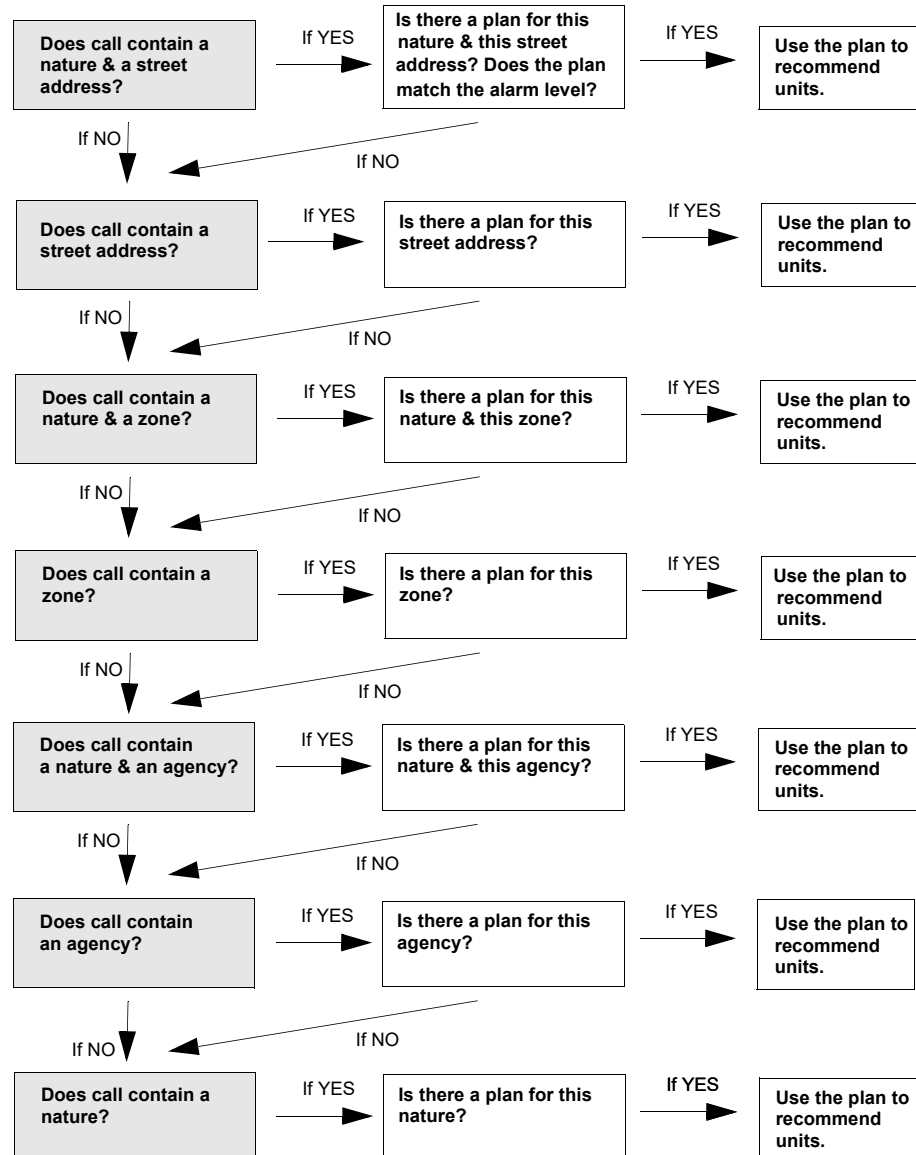
How CAD uses recommended unit plans

When a dispatcher opens a dispatch screen for a specific call, CAD goes through the following steps:

1. The software selects the units that are available for the call, using the criteria that you specified when you set up the recommended unit list.
2. The software sorts the list of recommended units according to the criteria you specified when you set up the recommended unit list. For a detailed explanation of how the software sorts recommended units, see [“Understanding how CAD sorts units” on page 143](#).
3. The software checks to see whether a recommended units plan exists for the call. For a detailed explanation of how the software selects a recommended units plan, see [“How CAD selects a recommended units plan” on page 158](#).
4. If the software finds a recommended units plan, the software uses the plan to select some of the recommended units. The selected units are marked by an asterisk (*). For a detailed explanation of how the software selects units, see [“How CAD selects recommended units” on page 159](#).

How CAD selects a recommended units plan

To select an applicable plan from the Recommended Units table, CAD goes through the logic illustrated, working from Category 1 to Category 7, if necessary:



How CAD selects recommended units

After CAD selects a Recommended Units plan, the software goes through the sorted list of recommended units and marks the units that meet the criteria specified in the plan. The software always starts at the top of the list and marks the first unit that meets the plan's criteria. Because of this, the way the list is sorted influences which units are most likely to be selected for dispatch.

The software applies a recommended units plan's criteria in the following order:

1. The software checks the **Unit Kind** and **Unit Station** fields. If any one of these fields contains a value, the software looks at the **Min Units** field. The software marks the specified number of units that meet the plan's criteria for kind and station.
2. The software checks the **Equipment** field. If the field contains a value, the software looks at any units that are already marked.
 - If one of the selected units has the required equipment, the software marks no additional units.
 - If none of the selected units has the required equipment, the software marks the first unit in the list that has the required equipment.
3. The software checks the **Min Staff** field. If the field contains a value, the software looks at the staff of any units that are already marked.
 - If the selected units have the required number of staff, the software marks no additional units.
 - If the selected units do not meet the staff requirements, the software marks additional units (of any kind and from any station) to meet the minimum staff requirement.

Recommended unit plan example

The following example illustrates how CAD marks recommended units.

Suppose a plan calls for two pumper trucks from the station **PFD Station 1**, two ladder trucks from any station, and any type of unit with an exhaust fan. The exhaust fan unit can be from any station. The plan calls for a total of 16 staff.

The software does the following:

1. Starts at the top of the recommended units list and marks the first two pumper trucks from the station **PFD Station 1**. If the list does not contain two pumpers from **PFD Station 1**, the software marks the first pumper or pumpers from any other station.
2. Starts at the top of the recommended units list and marks the first two ladder trucks from any station.

3. If none of the previously marked units has an exhaust fan, the software starts at the top of the recommended units list and marks the first unit of any kind that has an exhaust fan.
4. Calculates the number of staff assigned to the units that are already marked and compares it to the value in the **Min Staff** field. If the marked units do not have enough staff, the software starts at the top of the recommended units list and marks any unmarked unit until the minimum staff requirement is met.

In the above example, the **Min Units** field calls for five units. However, if one of the pumper trucks carries an exhaust fan, the software only marks four units. The **Min Staff** field calls for a total of 16 staff. If the pumper and ladder trucks do not have enough staff, the software might mark more than five units. To meet the staff requirements, the software might mark units of a different kind and from a different station than otherwise specified in the plan.

How the sort order affects the selection and display of recommended units

To select recommended units, the software starts at the top of the recommended units list and marks the first unit that meets the criteria in the recommended units plan. Therefore, you might want to define a sort order that places the most suitable units (as defined by the criteria in most of your recommended units plans) at the top of the list of recommended units. By doing so, you might enable your dispatchers to view all of the selected units without having to scroll through the list.

Use the following guidelines:

- If most of your recommended unit plans specify units by kind, use kind as one of your sort criteria.
- If most of your recommended unit plans specify units by station, use station as one of your sort criteria.
- If the agency of the unit is not important, do not include agency as a sort criteria (it has a higher sort priority than kind and station).

Using the rsetup database if you have Geobase

If you have the Geobase module, you can set up recommended units (or build response plans) in a special Practice database using the geobase data from your live system. Call Spillman Customer Support and ask a representative to set up an `rsetup` database on your system. `Rsetup` is a separate Practice database just for setting up response plans and recommended units. Do *not* use your regular Practice database to set up these plans. If you do, you will run into problems keeping your response plans, recommended units, and Live geobase in sync.

Setting up alarm levels for recommended unit plans

You can create recommended unit plans for different alarm levels. You are not required to have the Response Plans module to set up alarm levels for recommended unit plans. However, you can use recommended unit plans in conjunction with response plans.

The following table explains the basic similarities and differences between recommended unit plans and response plans.

Recommended unit plans	Response plans
Recommend kinds of units based on a specified sort.	Designate a specific responding unit (or units).
<ul style="list-style-type: none">• Define alarm levels.• Define the plan by nature or ProQA determinant.• Define by street address, zone, or agency.• Specify the day of the week and time of day to which the plan applies.	<ul style="list-style-type: none">• Define alarm levels.• Define the plan by nature or ProQA determinant.• Define by street address or zone.• Specify the day of the week and time of day to which the plan applies.
<ul style="list-style-type: none">• Specify unit rotation type.• Define required unit type(s), unit station, minimum required units per type, equipment, and minimum staff required.	<ul style="list-style-type: none">• Specify and link to the following record numbers: Responding Units, Personnel-Call-Back, Move Units (including Covering Units), and Mutual Aid.• Specify water sources.• Define map references.• Specify whether the plan uses specific units or uses recommended units.

Carefully consider your agency's needs and the setup involved before setting up recommended unit plans and response plans. Both recommended units and response plans are very powerful, but they do require well thought-out planning on your part. The following sections provide information about using alarm levels for recommended unit plans alone or with response plans.

Using alarm levels with recommended units

If your agency does not have the Response Plan module and you simply want to set up recommended units based on alarm levels, you can use the **Alarm Level** field on the Recommended Units screen. By defining alarm levels for recommended unit plans, you can create multiple recommended unit plans for the same nature. You can also specify the alarm level while dispatching a call.

Using alarm levels with recommended units and response plans

If you want to set up alarm levels for both response plans and recommended units, you can now allow a different recommend per response plan alarm level.

For example, suppose you set up a response plan for a structure fire and the alarm levels for the response plan are as follows:

- **Alarm level 1:** Send recommended units
- **Alarm level 2:** Send recommended units
- **Alarm level 3:** Send units F55, F87, F98, F37, F56

Suppose you also set up the following recommended unit plans with alarm levels:

- **Alarm level 1:** Send two pumper trucks
- **Alarm level 2:** Send two pumper trucks and a ladder truck

Based on the previous scenario, if you get a call for a level 1 structure fire that meets the requirements of the response plan (such as a specific address), the software recommends two pumper trucks based on the recommended unit plan, alarm level, and the `firesort` application parameter. If you get a call for a level 2 structure fire that meets the response plan, the software recommends two pumper trucks and a ladder truck based on the recommended unit plan, alarm level, and the `firesort` application parameter.

You can use recommended units with response plans by specifying that the response plan should use recommended units or by canceling a response plan.

Setting the response plan to use recommended units

If the response plan alarm level (`rp1level`) is set to recommend units, the software uses recommended units for the plan.

When a response plan refers to a recommended unit plan, the software compares the response plan record with the recommended unit plan record and checks for matching values in the following fields:

Response plan field	Recommended unit plan field
Nature (<code>rpmain.nature</code>)	Nature (<code>rumain.natur</code>)
Call Type (<code>rpmain.type</code>)	Unit Type (<code>rumain.utype</code>)
Address (<code>rpmain.geoid</code>)	Address (<code>rumain.geoid</code>)
Zone (<code>rpmain.rpzone</code>)	Zone (<code>rumain.zone</code>)
Alarm Level (<code>rp1level.alarm</code>)	Alarm Level (<code>rumain.level</code>)

If the values listed previously do not match, the software checks the values again to see if it can find a matching record where the **Alarm Level** field (`rumain.level`) in the recommended unit plan is blank. In addition, the software compares each unit from the response plan with the kind and station from the Recommended Units table (`recunit`). If the software cannot find a matching recommended unit plan record that contains a blank **Alarm Level** field or if the kind or station of the response plan unit do not match, the software does not include the response plan unit in any of the recommended unit lists and the software runs recommended units without a response plan.

Using the Recommended Unit Log Backdoor screen

To access the Recommended Unit Log Backdoor screen, enter `cdreclst` at the command line. Users can view this log by clicking the **Reclog** button on the Call Taker's screen in CAD. However, users cannot view information about who added or modified the information.

If you set the software to log recommended units, you cannot delete records from the Recommended Unit screen (`recunit`) that are referenced by the Recommended Unit Log screen (`cdreclst`).

The Recommended Unit Log Backdoor screen contains the following fields:

- **Long-Term Call ID**
Lookup field. The long-term call ID number.
- **Record Number**
The software generates the next consecutive record number using the Next Record Numbers table (`synxtids`).
- **Recommended**
Lookup field. Displays Y for yes or N for no and indicates whether the recommended unit was recommended.
- **Selected**
Lookup field. Displays Y for yes or N for no and indicates whether the recommended unit was selected.
- **Dispatched**
Displays Y for yes or N for no and indicates whether the recommended unit was dispatched.
- **When Modified**
The time and date the recommended unit log was created or modified.

- **Modified by**
The user ID and user name of the person who created or modified the call.
- **Recommended Unit Record Number**
The recommended unit record number.
- **Unit Number**
The recommended unit number.
- **Recommended Unit Plan Description**
The description of the recommended unit plan.
- **Unit Function(s)**
The unit function type (for example, PUMP for Pumper or PATR for Patrol). If the unit is serving more than one function, the software lists all of the functions.

Purging recommended unit logs

The recommended unit log file (`cdrec1st`) fills up quickly so you might want to purge older records regularly. Use the following two reports when purging recommended unit log records:

- The `rprudump` report
- The `rprudel` report

Dumping recommended unit logs

Run the `rprudump` report first to back up the recommended unit logs for archival purposes.

Deleting recommended unit logs

The `rprudel` report deletes recommended unit logs. The output of this report indicates how many records were deleted.

Deleting recommended unit log records does not reduce the size of the recommended unit log file on the hard disk. However, it makes room within the file for new recommended unit log records. This helps keep the file from growing as quickly.

Defining How CAD Determines the Number of Staff Assigned to a Unit

For the purpose of marking recommended units, the software determines the number of staff assigned to a unit by looking at the Units record. The software displays the number of staff in the recommended units list, and it uses the number to determine whether units meet the staff requirements specified in the recommended units plan.

The `unistaff` parameter determines whether the software uses the **Persons Required** field to determine the number of staff assigned to a unit if the **Officers Assigned** detail field contains no records. You have the following options:

- If you turn off the `unistaff` parameter (the default value), the software looks at the **Officers Assigned** detail field in the Units record (in the `cdunits` table). The software counts all officers listed in this detail field. If the detail field contains no records, the software lists the unit as having no staff.
- If you turn on the `unistaff` parameter, the software first looks at the **Officers Assigned** field and:
 - If the field contains a list of officers, it counts all officers in the field and then ignores the **Persons Required** field.
 - If this field is empty, it uses the value in the **Persons Required** field to determine the number of assigned staff.

If your agency does not assign particular officers to a unit (because the officers vary by shifts) but you want your Recommended Units plans to specify a minimum number of staff for each unit, do the following:

- In each Units record, leave the **Officers Assigned** detail field empty.
- In the **Persons Required** field, enter the number of staff assigned to the unit.
- Turn on the `unistaff` parameter.

To use the `unistaff` application parameter, do one of the following:

- To turn on the `unistaff` application parameter, enter **YES** in the **Application Parameter Value** field.
- To turn off the `unistaff` application parameter, enter **NO** in the **Application Parameter Value** field.

Setting Up the Rotation Type Table

You can use rotations when recommending units (for example, ambulances). After you create a plan that uses a rotation type, CAD lists the available units from that rotation type whenever a dispatcher is dispatching units for a call that matches the plan. CAD recommends the available unit that has been selected for dispatch to the fewest calls. (See the explanation under “Units” on page 167.)

NOTE

If a call uses a rotation, CAD bases each unit’s availability on the statuses set up in `cdrustat` or `tbl0codes`. (For more information, see “Defining when a unit is available for dispatch” on page 137.) It does not use the status *order* from `cdrustat`.

The dispatcher can select the recommended unit or can select multiple units from the rotation list if needed.

To use rotations, you must set up the Rotation Type table before you set up the Recommended Units table. Add the needed Rotation Type records into the `rptburot` table.

The Unit Rotation Table appears as below:

Fields on the Unit Rotation table

Rotation Type

15 characters, alphanumeric field. The type of rotation you are defining.

Units

Detail field. Click **Detail** (Ctrl+N) to access the Units detail window. Enter the units to add to the rotation type.

The **Calls** field beside each unit displays the number of times the unit has been selected for dispatch. Each time the dispatcher marks a unit for dispatch and presses <ACCEPT> (Ctrl+X), the software increments the number in that unit's **Calls** field by one (1). The number remains incremented even if the call is canceled.

If a unit is next in the rotation but is unavailable, CAD selects the *next* available unit and increments both units' Call numbers by 1. This feature prevents the unavailable unit from having a far lower number in Calls than the other units in the rotation.

When adding a new unit to a rotation, make that unit's Call number the same as the other units' so that the new unit is immediately incorporated into the rotation.

Setting Up the Recommended Units Table

Before adding Recommended Unit records (plans) in the `recunit` table, you might want to collect the necessary information on paper. Then, set up your plans, working from most specific to most general or vice versa. Remember that each plan must fit one of the seven categories of plans, listed in [“Types and categories of recommended unit plans” on page 156](#), and must be for a particular call type (law, fire, EMS, or miscellaneous).

The following guidelines apply:

- If your agency does not use the Spillman geobase address verification feature, you cannot set up a recommended unit plan for a specific address. (You cannot have a category 1 or category 2 plan.)
- Each plan *must* be unique. The software does not let you enter two plans that have the same information in the **Nature of Incident**, **Determinant**, **Street Address**, **Call Zone**, and **Agency** fields—*unless* the plans are for different days/times.
- Each plan must include a nature (or ProQA determinant) or “location” (street address, call zone, or agency) or both. The software does not accept plans that do not meet this requirement.
- Each plan can apply to only one location (street address, call zone, or agency). The software does not accept a plan if you specify more than one location. Notice that if you enter a street address, the cursor does not go to the **Call Zone** field or the **Agency** field.
- In each plan you can specify either the unit rotation or the units to recommend. You cannot include both in one plan.
- You need not enter a `recunit` record for every zone. If a plan applies to all zones but one, leave the **Zone** field blank (indicating that the plan applies to all zones) and then create another `recunit` record for the unique zone.
- To set up plans for miscellaneous-type calls, you must first set up the information to be used by the plan. For example, you must set up miscellaneous-type unit (or units) in `cdunit`, miscellaneous-type zone (or zones) in `tbzones`, miscellaneous-type nature (or natures) in `tbnatur`, and miscellaneous-type agency (or agencies) in `apagency`.

To enter information about the units required by the plan, use the **Recommended Unit Plan Lists** detail window. The detail window looks like the following sample:

rutypes

File Edit Search Tools Help

Exit Mod Add Del Back Fwd

Recommend Unit Plan Lists

Seq	Alias	Unit	Min	Min
	Kind	Station	Units	Staff
1	AMB		1	0
2	MDC		1	0

User: sds Add a new detail record OVR

Be aware that the software displays one recommended units list for each Detail record that you add to this detail table. In the above example, the software first displays a recommended units list and seeks to mark three tanker trucks, four staff, and one exhaust fan. After the dispatcher dispatches from this list, the software displays a new list and seeks to mark two ladder trucks and eight staff. Finally, the software displays a list and seeks to mark one pumper truck and four staff.

The values you enter in the **Alias Kind** and **Unit Station** fields affect both the sorting and the marking of units. Suppose you set up the software to sort a list by agency and kind and create a plan that specifies three pumpers. Then, suppose a dispatcher dispatches a call and that no pumpers are available for the agency that is responsible for the call. The software marks three pumpers even if they are not from the responsible agency.

Fields in the
Recommended
Units table
(recunit)

Following are explanations of the fields in the Recommend Units table:

Rec#

Display-only. Contains the software-generated sequential number assigned to this Recommended Units record.

Unit Type

Enter **1** (law), **f** (fire), **e** (EMS), or **m** (miscellaneous) to indicate the type of call to which the plan applies. This field is required. You *must* make an entry in this field for every Recommended Units record.

4 Setup for Recommend Units

Setting Up the Recommended Units Table

Nature of Incident

If the plan is for a particular nature of incident, enter the nature. This field is coded to `tbnatur`.

Determinant

If your agency uses ProQA, you can set up recommended plans based on the ProQA determinant instead of the call nature.

Street Address

If the plan is for a specific street address, enter the geobase-verified incident address. If your agency does not have the Spillman Geobase module implemented, do *not* enter anything in this field. The software cannot recommend units by a specific address without geobase.

City

Display-only. The code of the city containing the incident address. If you enter an address in the **Street Address** field, the software fills in the city when you accept the record.

Call Zone

If the plan is for incidents in a specific zone, enter the zone. This field is coded to `tbzones`.

Agency

If the plan is for a specific agency, enter the agency. This field is coded to `apagency`.

Alarm Level

Specify the alarm level for which you want the recommended unit record to apply.

Valid

Detail field. If the plan is valid for 7 days a week, 24 hours a day, skip this detail field. If the plan applies to particular days or times or both, click **Detail** (Ctrl+N) to open the detail window and complete the **Day**, **Start**, and **End** fields.

In each “Valid” record, the beginning and ending times must be on the same day. Specify the times in 24-hour format. For example, to make a plan valid

from 5:00 p.m. Monday through 8:00 a.m. Tuesday, create one entry for Monday (17:00 to 23:59) and one entry for Tuesday (00:00 to 08:00).

Valid: Day

Enter the corresponding number for the days of the week for which the plan is valid:

- 0 – Sunday
- 1 – Monday
- 2 – Tuesday
- 3 – Wednesday
- 4 – Thursday
- 5 – Friday
- 6 – Saturday

Valid: Start/End

In 24-hour format, enter the Start and End times for which this plan is to be effective on the specified day.

Rotation Type

Indicates the rotation type to use. Complete either this field *or* the **Units to Recommend** detail field. The software does not let you complete both fields.

Before entering a rotation type in this field, you must set up rotation types in `rptburot`, putting the units in the correct order for each rotation type. For more information, see [“Setting Up the Rotation Type Table” on page 166](#). The **Rotation Type** field is coded to that table, so you can click the Lookup button here to select from the available rotation types.

Recommended Unit Plan Lists

Detail field. Complete either this field (to specify the unit types for CAD to recommend for calls that match this plan) *or* the **Rotation Type** field. The software does not let you complete both fields.

Click **Detail** (Ctrl+N) to open the Recommended Unit Plan Lists window. Add information in one, some, or all of the following fields: **Alias Kind**, **Unit Station**, **Min Units**, **Equipment**, and **Min Staff**.

You can add several records in this detail. For a particular fire plan, for example, you might add records to recommend a minimum of one pumper truck with an exhaust fan and four staff from station SFD, a minimum of one ambulance from station SFD, and a minimum of one rescue truck with two officers, from any station.

The **Recommended Unit Plan Lists** detail field contains the following fields:

Alias Kind

Enter the alias kind code that CAD should use to select units for calls matching the plan that you are defining in the Recommended Unit record. Some alias kind codes are AMB, LADD, and PUMP. This field is coded to `tbakaknd`. For more information, see [“Defining Alias Kind codes” on page 74](#).

The entered in the **Alias Kind** and **Unit Station** affect both the sorting (if enabled) and the marking of units. Suppose you set up the software to sort a list by agency and kind and create a plan that specifies three pumpers. Then, suppose a dispatcher dispatches a call and that no pumpers are available from the agency that is responsible for the call. The software marks three pumpers even if they are not from the responsible agency.

Unit Station

If you want the plan to specify units from a particular station, enter the station code. This field is coded to `cdstatn`.

For an explanation of how the value you enter in the **Unit Station** field affects the sorting and marking of units, refer to the description of the **Alias Kind** field.

Min Units

Enter the number of units you want CAD to recommend. The **Min Units** field defaults to 1 during data entry. You can replace that value with any value larger than 0.

Equipment

You can enter information in this field only if your agency uses the Spillman Equipment Maintenance module (`equipmnt`), which lets you link units with equipment.

Enter any special equipment that the software should search for when recommending a unit for this plan. You can enter only one piece of equipment for each detail record. If the Equipment Maintenance module is not present,

the Equipment Item Code table (eqtbitem) contains no valid equipment codes and you cannot enter equipment.

If you specify equipment, the software first looks at the units that were selected based on other criteria, such as unit kind or station. If one of these units has the specified equipment, the software does not mark additional units. If none of the previously selected units has the equipment, the software goes through the available units and marks the first unit that has the required equipment.

When displaying the list of recommended units, the software displays an asterisk (*) in the **Equipment Required** field to mark all units that have the required equipment. If a unit has more than one piece of equipment, the software displays the required equipment first. An asterisk in the **Equipment Required** field does not mean that a unit is selected for dispatch, only that the unit has the equipment required by the recommended unit plan.

NOTE

The software recommends only equipment that is in service. It uses the **Status** field of the Equipment record to determine whether the equipment is in service.

Min Staff

Enter the minimum number of officers or other staff to recommend for this call. The **Min Staff** field defaults to 1 during data entry. In version 2.1 or later, you can enter any positive number or 0. Enter 0 if you do not want to set minimum staff requirements or if your agency does not specify the number of staff assigned to each unit.

NOTE

If you do not assign officers to a unit, the software enters the Unit number in the **Responding Officers** field of the incident record.

Limiting Mutual Aid for Recommended Unit Plans

If your dispatch center dispatches calls for multiple agencies and uses CAD to recommend units, you can set two mutual-aid limits for each agency. One limit specifies the maximum number of units to be dispatched outside the agency's area at any one time. The other limit specifies the maximum number of units to be dispatched outside the agency's area in a single dispatch.

Mutual-aid limits only affect the software's recommendation of units. They do not prevent dispatchers from dispatching a unit to a call outside the area of its agency, even if doing so causes them to exceed one of the agency's mutual-aid limits. The mutual-aid limit feature simply informs dispatchers if the software did not select a unit because of a mutual-aid limit. Make sure that you inform your dispatchers about your dispatch center's policy on exceeding mutual-aid limits.

Understanding mutual-aid limits

When the software selects units for dispatch, it finds the first unit that meets the requirements of the recommended unit plan. Before marking that unit for dispatch, the software determines (if your agency has enabled the mutual-aid functionality) whether the unit is from a different zone than the call. If so, the software determines whether that unit's agency has reached either of its mutual-aid limits, which are:

- The maximum number of units to be dispatched outside the agency's area at any one time.
- The maximum number of units to be dispatched outside the agency's area in a single dispatch.

If that unit's agency has reached either limit, the software looks for a unit from another agency.

When the software displays the recommended units list, it displays even those units that it deems "unavailable" because of a mutual-aid limit. It alerts dispatchers to these unavailable units by displaying the letter U (for "unavailable") in an unlabeled, single-character field that precedes the **Unit** field. The U indicates that, if a mutual-aid limit had *not* been reached, the software would have recommended the unit based on the plan's criteria.

Suppose your software is set up to recommend units based on proximity to the call address. Normally, the software would recommend the unit that is closest to the call. If that unit's agency has reached its mutual-aid limit, however, a U appears next to the unit ID and the software selects the next-closest unit.

How to define mutual-aid limits

Before you implement mutual-aid limits, make sure that:

- Your dispatch center's zone codes (in the `tbzones` code table) contain a valid agency code in the **Agency** field.
- Your dispatch center's Unit records (in the `cdunit` table) contain a valid agency code in the **Agency** field.

The software uses the agency information to apply mutual-aid limits.

CAUTION

If you use Geobase, the software enters zone information in the call record. If you do not use Geobase, make sure that your dispatchers enter a zone for each CAD call. If a Call record does not contain zone information, the software cannot apply mutual-aid limits to that call.

The `mutaid` parameter determines the limits for mutual aid. In the **Application Parameter Value** field, enter the following information for each agency for which you want to set mutual-aid limits:

- The agency code.
- The maximum number of units allowed outside the agency's area at any one time.
- The maximum number of units allowed outside the area in a single dispatch.

Following is a sample record for the `mutaid` application parameter.

The screenshot shows a software window titled "apparam" with a menu bar (File, Edit, Search, Tools, Help) and a toolbar. The main area is titled "Application Parameters Table". It contains three input fields: "Application Parameter Name" with the value "mutaid", "Parameter Description" with the value "Agencies' Mutual Aid Limits", and "Application Parameter Value" with the value "SFEM,F,F,SFD,4,1,CHCA,5,1". At the bottom, there is a status bar with the text "User: sds Search again to add records to current selection set" and "OVR Rec 1".

The parameter value can be comma (,), pipe (|), or return delimited. For example, enter:

SFEM,1,1,SFD,4,1,CHCA,5,1

Or enter:

SFEM,1,1

SFD,4,1

CHCA,5,1

Setting Status Sequences for Responding Units

To help the dispatcher update calls quickly, the software automatically updates the status of responding units. By default, it updates RCVD to ENRT, ENRT to ARRVD, and ARRVD to CMPLT. The dispatcher can overwrite the status in CAD if necessary.

Changing the default status sequence

The following `cdstatse` record is set up when you receive your Spillman software:

The screenshot shows a software window titled "Responding Units Status Order". It has a menu bar with "File", "Edit", "Search", "Tools", and "Help". Below the menu is a toolbar with icons for "Exit", "Search", "Modify", "Add", "Clear", "Delete", "View", "List", "Total", "Print", "Back", "Forward", "Jadd", "Jres", and "Jtbl". A status bar at the bottom left shows "User: sds" and "Go back in current set/table". The main area is titled "CAD Status Order" and contains a form with the following fields: "Number" (value 1), "Unit Kind" (empty), "Nature of Call" (empty), and "Agency" (empty). To the right of these fields is a table with two columns: "Status" and "Becomes". The table contains two rows: "ASSGN" and "RCVD". The "RCVD" row has a "+" sign in the "Becomes" column.

Status	Becomes
ASSGN	ASSGN
RCVD	RCVD +

CAD uses this default record as long as no other, more specific `cdstatse` record exists that matches a CAD call. Because this record contains no information that limits it to a particular unit kind, call nature, or agency, it applies to all unit kinds, all call natures, and all agencies.

If necessary, you can modify the default record. Before making any changes, note that:

- The `cdstatse` table must be set up properly for the CAD software to function properly.
- The table must contain a default `cdstatse` record.
- The **Status** field of this record must contain every code in the `tb10code` table.

Read the rest of this section for more information on how CAD uses `cdstatse` records.

Creating additional status sequences

Depending on the kind of unit or the nature of a call, the default sequence might not be appropriate for all units. If it is not, you can create additional `cdstatse` records that set up different status sequences. For example, for ambulances (unit kind AMB), you might create a `cdstatse` record with a sequence similar to the following:

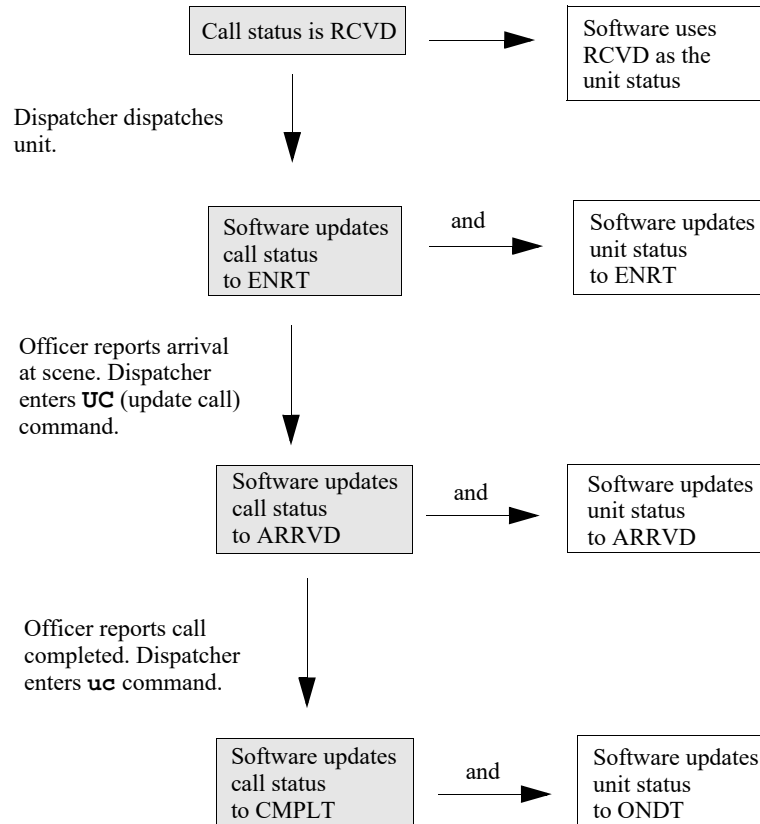
Call Status		Unit Status	
Enter this value in the Status field of the <code>cdstatse</code> record.*		Enter this value in the corresponding Becomes field of the <code>cdstatse</code> record.*	
RCVD	Received the call	RCVD	Received the call
ENRT	En route to the scene	ENRT	En route to the scene
ARRVD	Arrived at the scene	ARRVD	Arrived at the scene
ENRTH	En route to the hospital	ENRTH	En route to the hospital
HOSP	At the hospital	HOSP	At the hospital
RETRN	Returned to the station	RETRN	Returned to the station
CMPLT	Completed the call	ONDT	On duty
* Every value entered in the Status field or Becomes field must be defined by a code in the <code>tbl0code</code> table.			

How `cdstatse` works

Each phase of a CAD call has two statuses. One is the status of the call. The other is the status of the unit. In the `cdstatse` record, the **Status** field contains the call status and the **Becomes** field contains the unit status. During dispatch, the software performs the following procedure to determine the call status and the unit status to use next:

1. The software searches the **Status** field of the appropriate `cdstatse` record and finds the first call status that matches the ten-code entered from CAD.
2. The software then reads the *next* call status in the `cdstatse` record and updates the call status in CAD to that status.
3. The software uses the Becomes value that corresponds to the new call status as the new unit status.

The following illustration depicts this procedure for the first four call/unit statuses in the default `cdstatse` record:



NOTE

When you add a `cdstatse` record other than the default, you must specify either a unit kind or nature of call. You also must enter an agency.

Description of the `cdstatse` fields

Following are descriptions of the `cdstatse` fields:

Number

Display-only. The software-assigned sequential number unique to this table.

Unit Kind

If desired, enter the kind of unit the status applies to, for example, ambulance, fire, patrol. This field is coded to `tbvehknd`.

Nature of Call

If desired, enter the nature of the call, for example, heart attack, stroke, assault, drowning. This field is coded to `tbnatur`.

Agency

Enter the agency for the unit being dispatched.

In any `cdstatse` record other than the default, you must fill in the **Agency** field.

Status / Becomes

Detail field. Click **Detail** (Ctrl+N) to open the detail window and enter call statuses in the **Status** field and corresponding unit statuses in the **Becomes** field.

The **Status** field is coded to the `tb10code` table. Enter the call statuses in order. This is the ten-code status or inquiry code for the *call* as the dispatcher receives it. You can change the **Seq** (sequence) number to change the position of a particular status in the list.

In the **Becomes** field, enter the *unit* status as it appears on the dispatch screen.

Chapter 5

CAD Mapping

Jump to topic:

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Introduction

This chapter describes how to set up the CAD map. The instructions used depend on which CAD map your agency uses. There are two CAD maps available:

- **Classic CAD Mapping.** Uses shapefiles to display a map of your jurisdiction. For more information, see [“Setting Up the Classic CAD Mapping Module” on page 183](#).
- **CAD Mapping.** Uses web-based map services to display a map of your jurisdiction. For more information, see [“Setting Up the CAD Mapping Module” on page 203](#).

In addition, the Spillman Pictometry map can be used with both Mapping modules. To set up the CAD map to work with Pictometry, see [“Setting Up Pictometry” on page 225](#).

Setting Up the Classic CAD Mapping Module

This section contains setup and maintenance information for the Classic CAD Mapping module.

This manual does not contain information on how to set up the Automatic Vehicle Location (AVL) module, which works with the Mobile Mapping module to display units on a map of your agency. For information on how to set up the AVL module, see the *Automatic Vehicle Location (AVL) Manual*.

To use Classic CAD Mapping, complete the following tasks:

- [“Understanding the zoom factor” on page 183](#)
- [“Defining the vehicles to be displayed on the map” on page 184](#)
- [“Managing the directory location for your map files” on page 184](#)
- [“Configuring map layers” on page 185](#)
- [“Defining properties for layer components” on page 190](#)
- [“Determining the address settings of a street layer” on page 195](#)
- [“Working with orthophotographic layers” on page 196](#)
- [“Setting up the map to use hyperlinks” on page 197](#)
- [“Creating or saving a public configuration” on page 200](#)

Understanding the zoom factor

The zoom factor determines which layers and labels are visible on the map at any one time. To see the current zoom factor, press Ctrl+Shift+Z. To increase the zoom factor, zoom in on the map. To decrease the zoom factor, zoom out on the map. Layers and labels can be assigned a minimum and maximum zoom factor. Layers with a zoom factor of 1 are always visible. For more information on setting the zoom factor of a layer, see [“Setting the general properties for a layer” on page 188](#).

Use the following table to determine what each zoom factor displays on the map.

Zoom factor	Displays
1	The layer or labels
2	The layer or labels after the user zooms in one time
4	The layer or labels after the user zooms in two times

Zoom factor	Displays
8	The layer or labels after the user zooms in three times
16	The layer or labels after the user zooms in four times
32	The layer or labels after the user zooms in five times
64	The layer or labels after the user zooms in six times

Defining the vehicles to be displayed on the map

In `cdunit`, any unit that is set up to use Mobile is displayed on the map. If your agency has additional units in which a GPS receiver is installed, then set up those units in `cdunit` as well. For more information, see [“Setting Up Officer and Unit Information” on page 73](#). Units without a GPS receiver are displayed in the center of the zone to which they are assigned.

Managing the directory location for your map files

Map files can be saved to a directory on the network for all users to access, or the files can be saved to each computer that uses the CAD map. If your agency’s network is slow, then it is recommended to save the map files directly on each computer. For users with laptop computers, it is required to save the map files on each laptop computer.

Setting a directory location for your map files

Upon installation, all files for the CAD map are placed in the following directory:

`C:\Program Files\Common Files\ESRI.`

It is recommended to use this location to save the map layer files. Create a folder called **Maps** at this location, and then copy your map files to the folder. If desired, your map files can also be saved at a different location, and the software can be configured to look for the map files at the set directory location.

Once the directory location is set, add the directory path to the **Path for Map Data Files** field in the **Map Settings** tab of the Configuration screen. The software uses the field to determine where the map files are stored.

Synchronizing map files

Map files are synchronized with the specified directory location each time a user logs in, so that the most recent files are always accessed. If your agency saves the map files to a directory on the network, then multiple directories can be created based on agency needs.

To create multiple directories on the server, use the following format:

- For all users: `/uclient/all/maps/`
- For a state: `/uclient/stateabbreviation/maps/`
- For an agency: `/uclient/agencycode/maps/`

NOTE

The Agency code is the agency listed in the Units table (`cdunit`), not the agency in the Unit Status Backdoor table (`syunit`) or the Official Names Codes table (`apnames`). For UNIX and Linux users, the Agency code must be entered in lower case.

For multi-server agencies, the `uclient` folder is created on the parent server, not on the individual agency servers.

- For an individual user: `/uclient/username/maps/`

The maps directory specified in the Configuration screen is exempt from the automatic deletion that occurs when the server is synced with the client. If a file is removed from the server, but still exists in the specified maps directory, it is not automatically deleted from the client. Therefore, if a file is no longer required, it must be deleted manually.

Configuring map layers

The layers used in map configurations must be saved as ESRI Shapefiles (`.shp`). Use Geographic Information System (GIS) software, such as ArcGIS, to convert map layers into ESRI Shapefiles. For more information, see your GIS documentation.

Completed map layers are used to create map configurations for your agency. To create a map configuration, use the **Layers** pane to add, rearrange or hide layers, and to view layer components.

The **Layers** pane is also used to define the properties of a layer. For more information, see [“Defining properties for layer components” on page 190](#).

The following table explains the basic tasks that can be performed in the **Layers** pane.

To	Do this
Move a layer to the foreground	Drag the layer to the top of the list in the Layers pane.
Show a layer	Select the check box next to the name of the layer.
Hide a layer	Clear the check box next to the name of the layer.
View the components of a layer	Click the plus sign next to the layer name.
Hide the components of a layer	Click the minus sign next to the layer name.

Adding and removing map layers

As many layers can be added to your map as desired, or layers can be removed as needed.

CAUTION

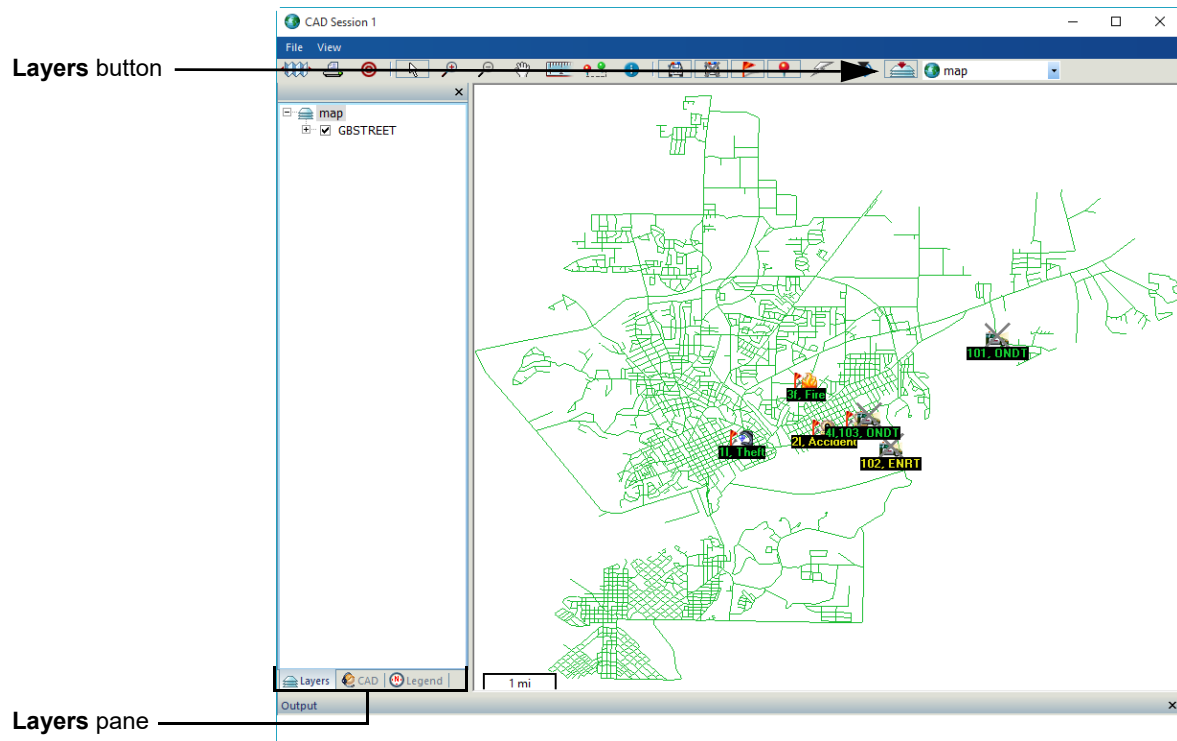
Adding numerous layers or creating detailed layers increases the number of system resources your computer must use to properly display the map and might slow the performance of Mobile.

Adding a layer

To add a layer to the map:

1. From the Mapping toolbar, click **Layers** (Ctrl+L).

The **Layers** pane opens.



2. Right-click the configuration name, and then select **Add Layer**.

The Add Layer dialog box opens.

3. Navigate to the file location in which your map layers are stored, select the layer to add, and then click **Open**.

NOTE

By default, the type of layer to select is `.shp`. If an orthophotographic layer is being added, then select the type of orthophotograph being added from the file type drop-down list. For example, if your orthophotograph is a TIFF file, then select Tagged Image File Format (`.tiff`, `.tif`, `.tff`).

The layer is added to your configuration.

4. Save the configuration. See [“Creating or saving a public configuration”](#) on page 200.

Removing a layer

To remove a layer from the map, from the Mapping toolbar, click **Layers** (Ctrl+L). The **Layers** pane opens. Right-click the layer, and then select **Remove**. The layer is removed from the map. When finished, save the configuration. For more information, see [“Creating or saving a public configuration” on page 200](#).

Setting the general properties for a layer

General properties set the name, visibility, and zoom factors for the layer.

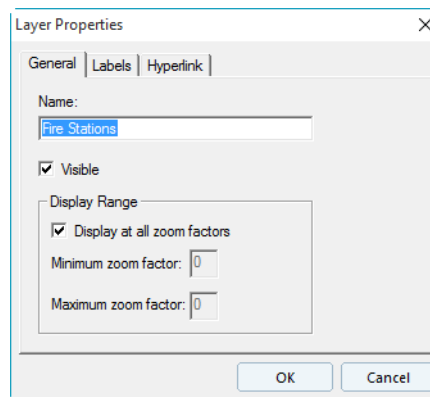
To set the general properties for a layer:

1. From the Mapping toolbar, click **Layers** (Ctrl+L).

The **Layers** pane opens.

2. Right-click the name of the layer, and then select **Properties**.

The Layer Properties dialog box opens.



3. If necessary, click the **General** tab.
4. If desired, in the **Name** field, change the name of the layer to one that describes the layer, such as **Streets**, **Cities**, or **Zones**.
5. To show or hide the layer, select or clear the **Visible** check box.
6. In the **Display Range** area, do one of the following:
 - To use the default zoom factors, select the **Display at all zoom factors** check box.
 - To set the zoom factors, clear the **Display at all zoom factors** check box. In the **Minimum zoom factor** and **Maximum zoom**

factor fields, enter the minimum and maximum zoom factor values.

NOTE

The zoom factor is the magnification that the map must exceed for the layer to appear on the map. For example, if a minimum zoom factor of 0 and a maximum zoom factor of 20 is entered, then the layer is not displayed after a zoom factor of 20 is exceeded. If a minimum zoom factor of 1.0 and a maximum zoom factor of 0 is entered, then the layer is displayed for all zoom factors above 1.0.

7. Click **OK**.

The Layer Properties dialog box closes and the changes are applied.

8. Save the configuration. See [“Creating or saving a public configuration”](#) on page 200.

Setting label properties for a layer

Label properties set the color and label names of the layer components in both the **Layers** tab and on the map. The zoom factor at which labels are displayed on the map is also set.

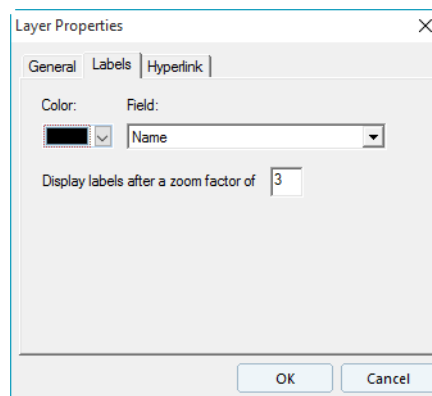
To set the label properties for a layer:

1. From the Mapping toolbar, click **Layers** (Ctrl+L).

The **Layers** pane opens.

2. Right-click the layer name, and select **Properties**.

The Layer Properties dialog box opens.



3. Click the **Labels** tab.

4. In the **Color** field, select a color from the drop-down list, or click **Other** to customize a color.

5. In the **Field** field, select the field whose value should be used as the label from the drop-down list.

NOTE

If a value is entered in the **Field** field, then labels can be quickly viewed for the specified layer on the map. To display the label, rest the mouse pointer on a map element on the layer. The label disappears when the mouse is moved or any key is pressed.

6. In the **Display labels after a zoom factor of** field, enter the zoom factor at which the label is displayed. See [“Understanding the zoom factor” on page 183](#).
7. Click **OK**.

The Layer Properties dialog box closes and the changes are applied.

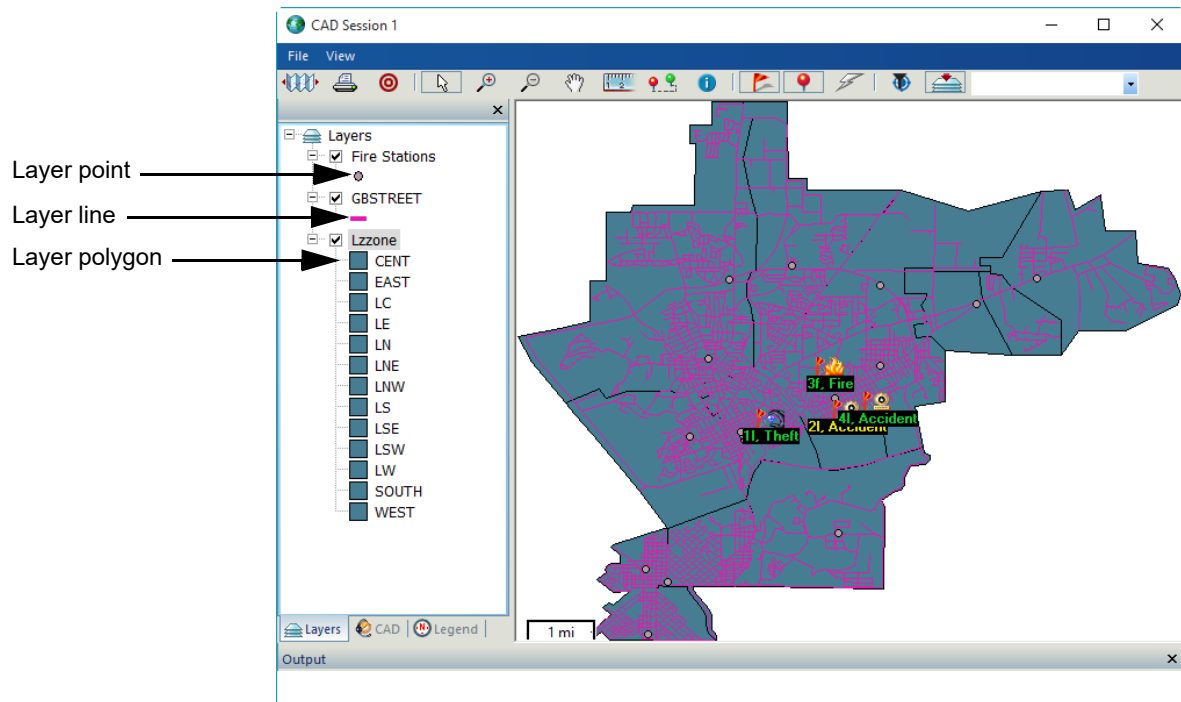
8. Save the configuration. See [“Creating or saving a public configuration” on page 200](#).

Defining properties for layer components

Layers are made of one of the following components:

- **Polygons.** Define a large area of the map, such as city codes and subdivisions.
- **Lines.** Define features, such as streets or rivers.

- **Points.** Define points on the map, such as landmarks or businesses.



To define properties for specific layer components, complete the following tasks:

- “Defining properties for a polygon” on page 191
- “Defining properties for all lines in a layer” on page 192
- “Defining properties for all points in a layer” on page 193
- “Selecting a font marker” on page 194

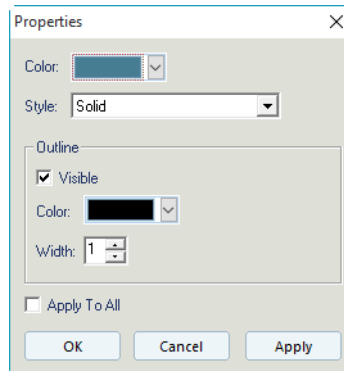
Defining properties for a polygon

The properties for up to 50 individual polygons per layer can be defined.

To define properties for a polygon:

1. From the Mapping toolbar, click **Layers** (Ctrl+L).
The **Layers** pane opens.
2. Click the plus sign next to the layer that contains the polygon to define.
3. Right-click the polygon, and then select **Properties**.

The Properties dialog box opens.



4. In the **Color** field, select a color from the drop-down list, or click **Other** to customize a color.
5. In the **Style** field, select the pattern or style to use.

NOTE

If the **Transparent** style is used, then the background color of your map is used, and not the color specified in the **Color** field. If **Light Gray Fill**, **Gray Fill**, or **Dark Gray Fill** is specified, then the color selected in the **Color** field is formatted so that it can be seen through.

6. To display an outline around the polygon, in the **Outline** area, select the **Visible** check box and do the following:
 - In the **Color** field, select a color from the drop-down list, or click **Other** to customize a color.
 - In the **Width** field, select the width for the outline.
7. To apply the settings to all polygons in the layer, select the **Apply To All** check box. Otherwise, clear the check box to apply the settings to only the currently selected polygon.
8. Click **OK**.
Your changes are applied to the map.
9. Save the configuration. See [“Creating or saving a public configuration” on page 200](#).

Defining properties for all lines in a layer

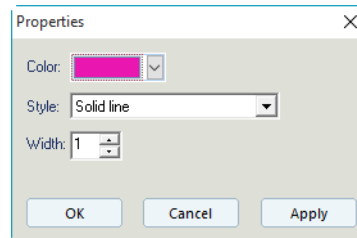
To define properties for all lines in a layer:

1. From the Mapping toolbar, click **Layers** (Ctrl+L).

The **Layers** pane opens.

2. Click the plus sign next to the line layer to define.
3. Right-click the line icon, and then select **Properties**.

The Properties dialog box opens.



4. In the **Color** field, select a color from the drop-down list, or click **Other** to customize a color.
5. In the **Style** field, select a line style from the drop-down list.
6. In the **Width** field, select a line width.
7. Click **OK**.

Your changes are applied to the map.

8. Save the configuration. See [“Creating or saving a public configuration” on page 200](#).

Defining properties for all points in a layer

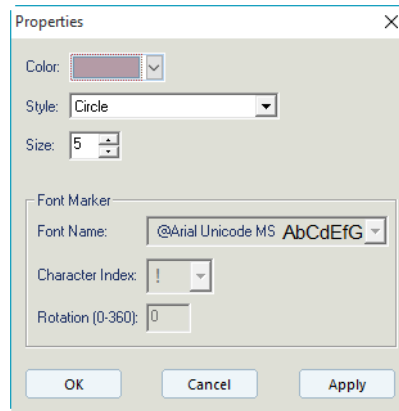
To define properties for all points in a layer:

1. From the Mapping toolbar, click **Layers** (Ctrl+L).

The **Layers** pane opens.

2. Click the plus sign next to the layer to define.
3. Right-click the point icon, and then select **Properties**.

The Properties dialog box opens.



4. In the **Color** field, select a color from the drop-down list, or click **Other** to customize a color.
5. In the **Style** field, select a point style from the drop-down list.
 - To use a font marker as a point icon, such as an icon for all homicides, select **True Type**. Continue to [“Selecting a font marker” on page 194](#).
6. In the **Size** field, select the size for the point icon.
7. Click **OK**.

Your changes are applied to the map.

8. Save the configuration. See [“Creating or saving a public configuration” on page 200](#).

Selecting a font marker

With the Properties dialog box open for a point layer and **True Type** selected in the **Style** field, a font marker for a point icon can be selected.

To select a font marker:

1. In the **Font Marker** area, in the **Font Name** field, select the name of the font to use from the drop-down list.
2. In the **Character Index** field, select the font marker to use as the point symbol from the drop-down list.
3. To rotate the icon, in the **Rotation (0-360)** field, enter the number of degrees.
4. If necessary, in the **Size** field, change the font size.
5. Click **OK**.

Your changes are applied to the map.

6. Save the configuration. See [“Creating or saving a public configuration”](#) on page 200.

Determining the address settings of a street layer

Use the Street Layer Settings dialog box to set the street layer settings so that the software can locate addresses on the map.

NOTE

Only one street layer can be set up in the Street Layer Settings dialog box. If this dialog box is used for multiple street layers, then the settings are applied only to the layer most recently set up.

To set the address settings for your street layer:

1. From the Mapping toolbar, click **Layers** (Ctrl+L).

The **Layers** pane opens.

2. Right-click the configuration name, and then select **Street Layer Settings**.

The Street Layer Settings dialog box opens.

3. Complete the following:

- **Street Layer** field: Select the street layer from the drop-down list. This list only contains line layers. If using more than one street layer, then select the primary street layer.
 - **Address Fields** area: Select a value from the drop-down list for each field to match them to the corresponding fields from your GIS software.
 - **Required Match Score (0-100)** field: Enter the value of tolerance to allow for address matches. A value of 100 requires a perfect match for the software to recognize the street. A value of 50–70 is considered a good match. Anything less than 50 is considered a poor match.
 - **Spelling Sensitivity (0-100)** field: Enter the value of tolerance to allow for spelling variations. The lower the value, the more variation the address locator allows. Using a lower value is recommended.
4. Click **OK**.
 5. Save the configuration. See [“Creating or saving a public configuration” on page 200](#).

Working with orthophotographic layers

Orthophotographs, such as aerial photographs or satellite images of your jurisdiction, are a type of raster that allows users to see map features that can provide additional information about a location. For example, if a dispatcher receives a call about an accident on a rural road next to a pond and a hill, then viewing an orthophotograph of the area can help the dispatcher pinpoint the location.

See your GIS documentation for a list of file types that are compatible with your GIS software.

Georeferencing an orthophotographic image in ArcGIS

If your agency uses ArcGIS and your orthophotographic image was not created with the same projection coordinates as your geobase (street) layer, then the projection coordinates for the image can be cleared and the image can be manually georeferenced to the geobase layer. Georeferencing allows the layer to be brought into alignment with an orthophotographic layer.

For more information, refer to your ArcGIS documentation, and the *Classic Geobase Administrator Manual*, *Geobase Administrator Manual*, or *GeoValidation Manual*, as appropriate for your software version.

Setting up the map to use hyperlinks

Hyperlinks can be added to points on the map to provide additional information, such as a map of a building or a photograph.

Hyperlinks can be created for point layers only. For more information on how to create hyperlinks for the map, see your GIS documentation. Once the hyperlinks are created, the Mobile map must be set up to use them.

To set up the Mobile map to use hyperlinks, complete the following tasks:

- [“Adding hyperlinks” on page 197](#)
- [“Setting hyperlink properties for a layer” on page 198](#)
- [“Setting a directory path to hyperlink files” on page 199](#)

Adding hyperlinks

To show hyperlinks on the map, the hyperlinks must be added to features in the desired map service. The following instructions describe how to set up hyperlinks for common places in ArcGIS. For more information, refer to your ArcGIS user documentation.

To add hyperlinks:

1. In ArcGIS, open the `.dbf` table for the point table to which hyperlinks will be added. For example, `Common Places`.
2. Click **Options**, and then select **Add Field**.
The Add Field dialog box opens.
3. Complete the following fields:
 - **Name:** Enter **Hyperlink**.
 - **Type:** Select **Text** from the drop-down list.
4. If desired, in the **Field Properties** area, enter the number of characters for the field length. By default, the length is 50 characters.
5. Click **OK**.

The **Hyperlink** field is added to the table.

The screenshot shows the ArcGIS interface with a table titled 'Common Places'. The table has the following columns: OBJECTID, Shape, Housenum, PreDir, StreetName, LocationText, CommonName, JoinID, IsIntersection, and Hyperlink. The table contains 19 records. The Hyperlink column is currently empty for all records.

OBJECTID	Shape	Housenum	PreDir	StreetName	LocationText	CommonName	JoinID	IsIntersection	Hyperlink
1	Point	1009	<Hub>	Route 9	1009 Route 9	American Marketing 17	1	F	https://www.ama.org/Pages/Def
2	Point	1201	<Hub>	Hooper Ave	1201 Hooper Ave	American Greetings	2	F	http://www.americangreetings.c
3	Point	1688	<Hub>	Route 9	1688 Route 9	American Furniture & Rug Clean	3	F	http://www.betolive.com/articles/
4	Point	1201	<Hub>	Hooper Ave	1201 Hooper Ave	American Eagle Outfitters	4	F	https://www.ae.com/
5	Point	1608	<Hub>	Route 37 E	1608 Route 37 E	Amanya's Cigars	5	F	http://robustope.com/encore/ciga
6	Point	1231	<Hub>	Route 166	1231 Route 166	Art's Place	6	F	<Hub>
7	Point	1689	<Hub>	Route 9	1689 Route 9	Art's Life & Lighting	7	F	<Hub>
8	Point	1341	<Hub>	Route 9	1341 Route 9	Art's Life Services 12/13	8	F	<Hub>
9	Point	2017	<Hub>	Route 9	2017 Route 9	AJ Cars	9	F	<Hub>
10	Point	1201	<Hub>	Hooper Ave	1201 Hooper Ave	Aquamarine All Odds	10	F	<Hub>
11	Point	1290	<Hub>	Route 9	1290 Route 9	After Hours Barber Shop	11	F	<Hub>
12	Point	2165	<Hub>	Route 9	2165 Route 9	AC Hesse Contractors	12	F	<Hub>
13	Point	2253	<Hub>	Route 9	2253 Route 9	Academy Bus Lines	13	F	<Hub>
14	Point	38	<Hub>	Robbins St	38 Robbins St	Adenoute Real Estate	14	F	<Hub>
15	Point	2606	<Hub>	Route 37 E	2606 Route 37 E	ABC Upholstery	15	F	<Hub>
16	Point	611	<Hub>	Main St	611 Main St	Adorff Appliance	16	F	<Hub>
17	Point	1765	<Hub>	Route 9	1765 Route 9	A.J. Richards Heating & Air	17	F	<Hub>
18	Point	1425	<Hub>	Route 9	1425 Route 9	AUL-1 Taxi Inc	18	F	<Hub>
19	Point	2023	<Hub>	Route 9	2023 Route 9	EZ Auto Rental	19	F	<Hub>

6. In the **Hyperlink** field for the desired record, do one of the following to add a hyperlink:

- Enter the directory path to the file. URLs can also be added.
- If a directory location for all hyperlinks has been set, then enter a period and the unique portion of the path. For example, to link to a photograph that is stored in the directory named `LiquorStoreFire.jpeg`, enter `./LiquorStoreFire.jpeg`. To set a hyperlink directory location, see “[Setting a directory path to hyperlink files](#)” on page 199.

7. Repeat step 6 for each record in the table that needs a hyperlink.

8. When finished, save the changes to the table and exit ArcGIS.

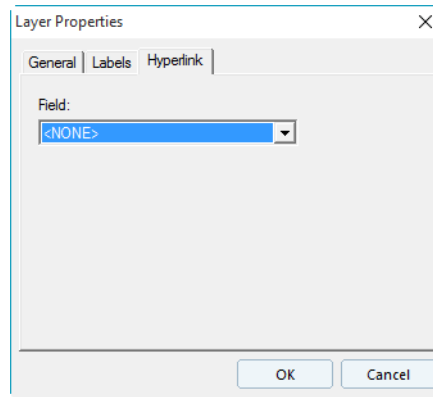
Setting hyperlink properties for a layer

Hyperlinks can be added to a point layer only. Hyperlinks are used to display a link on the map to a directory location where files about the location on the map are saved, such as floor plans for a building.

To set the hyperlink properties for a point layer:

1. From the Mapping toolbar, click **Layers** (Ctrl+L).
The **Layers** pane opens.
2. Right-click the point layer name, and then select **Properties**.

The Layer Properties dialog box opens.



3. Click the **Hyperlink** tab.
4. In the **Field** field, select the name of the field that contains the hyperlinks from the drop-down list.
5. Click **OK**.

On the map, the **Links** button is enabled. When the **Links** button is clicked, a yellow lightning bolt for each hyperlink is displayed on the map.

6. Save the configuration. See [“Creating or saving a public configuration” on page 200](#).

Setting a directory path to hyperlink files

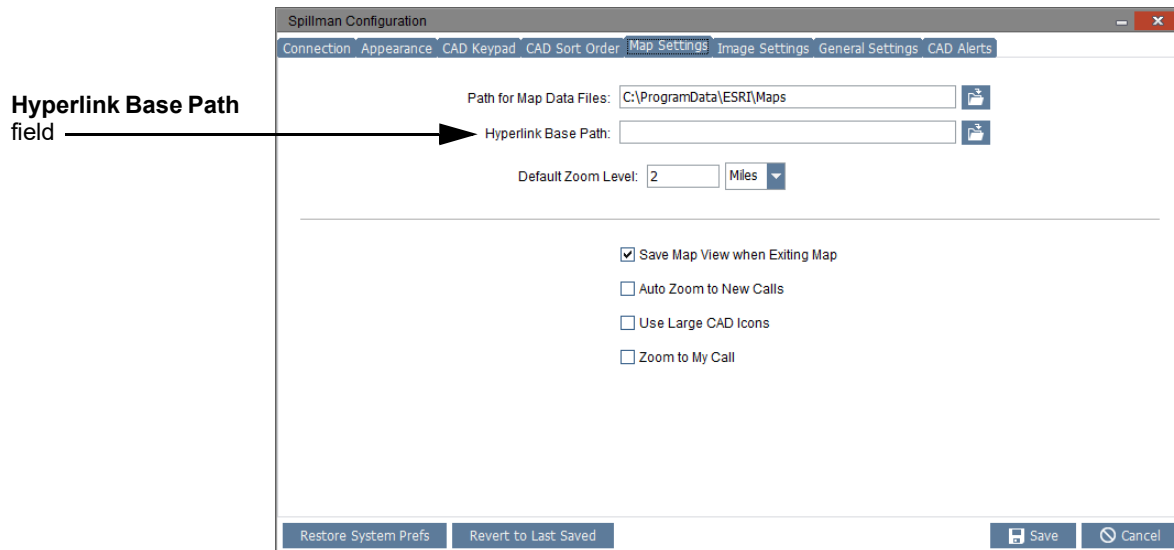
If your agency stores all the files to which hyperlinks are created in a central directory location, then the directory path must be set. However, if your agency sets up dynamic hyperlinks, then this process is not needed.

To set the directory path to hyperlink files:

1. From the menu bar, select **File > Configure**, or at the command line, enter **config**.

The Configuration screen opens.

2. Select the **Map Settings** tab.



3. In the **Hyperlink Base Path** field, enter the directory path for your hyperlink files.
4. Click **OK** to close the Configuration screen apply your changes.
5. If necessary, apply the settings to other users. For more information, see the *Application Setup and Maintenance Manual*.

Creating or saving a public configuration

To create or save changes to public configurations for use by all CAD users, Super User privileges are required.

To create or save a public configuration:

1. At the command line, enter **su**.
Super User status is enabled.
2. From the Mapping toolbar, in the **Configuration** field, select a public configuration, and then click **Layers** (Ctrl+L). Public configurations are identified by a world icon.
The selected configuration is displayed on the map and the **Layers** pane opens.
3. Set the properties of the map configuration. Complete any of the following:
 - “Configuring map layers” on page 185

- “Defining properties for layer components” on page 190
 - “Determining the address settings of a street layer” on page 195
 - “Working with orthophotographic layers” on page 196
 - “Setting up the map to use hyperlinks” on page 197
4. In the **Layers** pane, right-click the configuration, and then select **Save**.

The Save As dialog box opens.

5. Do one of the following:
- To save your changes as a new public configuration, enter a new name for the configuration, and then click **OK**. The new configuration is saved and appears in the **Configurations** field.
 - To save your changes and overwrite the existing configuration, click **OK** without changing the name of the configuration. A dialog box opens, asking if the existing configuration should be overwritten. Click **Yes**. The changes are saved to the configuration.

If a user is set up to access the map directory on the network, then the changes are available the next time the user logs in. If the map directory is set to a location on the individual’s computer, then continue to step 6.

6. Copy all the map files that the configuration references and place them in the map directory for each user. For more information about creating map directories, see “[Managing the directory location for your map files](#)” on page 184.

Once the files are placed in the directory, they are available for use.

Deleting a configuration

If a configuration is no longer needed, then it can be deleted.

To delete a configuration:

1. At the command line, enter **su**.
Super user status is enabled.
2. From the Mapping toolbar, in the **Configuration** field, select a public configuration, and then click **Layers** (Ctrl+L). Public configurations are identified by a world icon.
The selected configuration is displayed on the map and the **Layers** pane opens.
3. Right-click the configuration name, and then select **Delete**.

A dialog box opens, asking to confirm if the configuration should be deleted.

4. Click **Yes** to delete the configuration.

The configuration is deleted and is unavailable the next time users log in.

Setting Up the CAD Mapping Module

This section describes the setup instructions for the CAD Mapping module only. For information about how to set up the AVL module and the UNS Interface, see the *Automatic Vehicle Location (AVL) Manual*. For information about how to set up the Quickest Route module, see the *Quickest Route Manual*.

To set up the CAD map, complete the following:

- [“Setting up the Mapping module” on page 203](#)
- [“Using the Mapping Web Application” on page 204](#)
- [“Setting Up Map Configurations” on page 209](#)
- [“Managing Icon Associations” on page 216](#)
- [“Managing Custom Icons” on page 218](#)
- [“Managing Bookmarks” on page 220](#)
- [“Setting Up Pictometry” on page 225](#)

The following information is also described, but not required to set up the map:

- [“Viewing the Web Map” on page 224](#)

Setting up the Mapping module

To set up the Mapping module, complete the following:

- [“Setting up module settings” on page 204](#)
- [“Setting up system privileges” on page 204](#)

Additional settings are set up using the Mapping web application. For more information, see [“Using the Mapping Web Application” on page 204](#).

Setting up module settings

The following module setting needs to be set up in the Administration Manager (adminutil), in the **Module.Mapping** folder. For more information about setting up module settings, see the *Application Setup and Maintenance Manual*.

Setting	Description	Value
useSentryxCADMapping	<p>Enables the CAD map.</p> <ul style="list-style-type: none"> Set to True to enable the CAD map. Set to False to use the Classic CAD map. <p>By default, the value is False.</p>	True/False

Setting up system privileges

The following system privileges need to be set up in the Administration Manager (adminutil). For more information about setting up system privileges, see the *Security Setup and Maintenance Manual*.

System privilege	Description	Privilege
MapAdmin	<p>Gives users access to the Mapping web application.</p> <p>To use the Mapping web application, Access privileges are required.</p>	<p>Access</p> <p>NOTE: This privilege should be given to administrative users only.</p>
mapbarriers	<p>Gives users the ability to add, modify, and remove barriers on the map.</p> <p>To add, modify, or remove a barrier, Add, Modify, and Delete privileges are required. Privileges are not required to view barriers.</p>	Add, Modify, Delete
mdcadmalerts	<p>Allows users to modify, dismiss, and set expiration times for ATL, BOLO, and Emergency alerts sent by other users. For general users to send ATL, BOLO, and Emergency alerts, no special privileges are required.</p> <p>This privilege affects any alert in the Message Center, Mobile map, or CAD map.</p>	<p>Access, Add, Modify</p> <p>CAUTION: Dismissing the alert affects <i>all</i> users. Therefore, it is recommended to give the privilege of dismissing alerts to a few select individuals who have the information required to judge when the alert should be dismissed.</p>

Using the Mapping Web Application

The Mapping web application is used to set up the map settings and map configurations.

To use the CAD Map, in the Mapping web application, complete the following:

- “Configuring the Properties Screen” on page 206
- “Setting Up Map Configurations” on page 209

The following tasks can be completed, but are not required to use the map:

- “Managing Icon Associations” on page 216
- “Managing Custom Icons” on page 218
- “Viewing the Web Map” on page 224

Accessing the Mapping web application

To access the Mapping web application:

1. Log on to the Application Server. For more information, see the *Application Setup and Maintenance Manual*.

The Application Server opens.



2. Click the **Mapping** icon.

The Mapping web application opens to the Properties screen.

Configuring the Properties Screen

For the map to connect to your database, the settings in the Properties screen must be configured.

To configure the Properties screen settings:

1. Open the Mapping web application. See [“Accessing the Mapping web application”](#) on page 205.

The Mapping web application opens to the Properties screen.

Spillman Application Manager

WebApp Manager » Mapping » Properties

Properties Map Configurations Icon Associations Icon Manager Open Map

Update button → Properties

Properties

DATABASE CONNECTION

Adapter:

Database Pool Context Limit:

Geometry Service:

INTERFACE LOGGING

Log Level:

Maximum Log Size:

Maximum Backups:

Rotate Logs: ☐

E9-1-1 PUSH NOTIFICATIONS

API Token:

BARRIER LAYER MAPPINGS

Name:

Start Time:

End Time:

Notes:

Update

2. Complete the appropriate fields. For field descriptions, see [“Properties screen field descriptions” on page 207](#).
3. Click the **Update** button.
The **Message** area appears, and a message is displayed. Messages vary depending on what user action is required.
4. Follow the instructions in the message. If no further action is required, then continue configuring the server settings as needed.

Properties screen field descriptions

The following section describes fields on the Properties screen.

NOTE

Values entered in the Properties screen fields vary by agency, and depend on the settings for the external database your agency is using.

TIP

Rest the mouse pointer on the field name to display a ToolTip with the field definition.

Adapter

Enter the name of the database adapter.

Database Pool Context Limit

Enter the maximum number of database contexts allowed for the database pool. By default, this field is left blank. If this field is left blank, then the default number is used. It is recommended to leave this field blank.

Geometry Service

Enter the geometry service URL for your map. By default, this field is populated with a public ESRI geometry service.

Log Level

To specify the amount of information to log, select one of the following log levels:

- Default: Displays errors and warning messages.
- Error: Displays errors only.
- Debug: Displays basic troubleshooting information.
- Full Debug: Displays in-depth troubleshooting information.

Maximum Log Size

Displays the maximum size the log can be before the log files are rotated. The default is 10000000 bytes.

Maximum Backups

Displays the maximum number of backups to keep. The default is 5.

Rotate Logs check box

Select this option to automatically rotate logs when the map's interface with the server is restarted. By default, the check box is selected.

API Token

Enter the API token for accepting E9-1-1 calls.

Name

Enter the name of the **Name** field as it appears in the barrier map service. By default, the value is NAME. For barriers to work properly, this field must be included in the barrier configuration. It is recommended to use **NAME** as the field name.

Start Time

Enter the name of the **Start Time** field as it appears in the barrier map service. By default, the value is START_TIME. For barriers to work properly, this field must be included in the barrier service configuration. It is recommended to use **START_TIME** as the field name.

End Time

Enter the name of the **End Time** field as it appears in the barrier map service. By default, the value is END_TIME. For barriers to work properly, this field must be included in the barrier configuration. It is recommended to use **END_TIME** as the field name.

Notes

Enter the name of the **Notes** field as it appears in the barrier map service. By default, the value is NOTES. For barriers to work properly, this field must be included in the barrier configuration. It is recommended to use **NOTES** as the field name.

Setting Up Map Configurations

Map configurations are set up in the Map Configurations screen. Maps are created using a map service software, which produces a URL that is used to access the map on your mapping server. For information on creating a map service, see the map service software user documentation.

To set up a map to display in CAD, complete the following tasks:

- [“Understanding the Map Configurations screen” on page 210](#)
- [“Creating a map configuration” on page 210](#)
- [“Adding a map service to a map configuration” on page 212](#)

Understanding the Map Configurations screen

To access the Map Configurations screen, open the Mapping web application, and then click **Map Configurations**.

The Map Configurations screen opens.

Create Map Configuration button
Configuration Name header

The screenshot shows the 'Map Configurations' screen within the 'Application Manager'. The breadcrumb trail is 'WebApp Manager » Mapping » Map Configurations'. There are tabs for 'Properties', 'Map Configurations' (selected), 'Icon Associations', 'Icon Manager', and 'Open Map'. A 'Create Map Configuration' button is located at the top right. Below the tabs, there is a list of configurations. The first configuration is 'BARRIERS', which has an 'Edit' button and a 'Delete' button. Its details are: Owner: World, Route URL: http://gis10/ArcGIS/rest/services/SLCNetworkAnalyst/NA Server/Route, Barrier URL: http://gis102:6080/arcgis/rest/services/Barriers/FeatureServer/0, and Map Services: Open Street (Type: OpenStreet, URL: adsfds). The second configuration is 'DEMO MAP', which also has 'Edit' and 'Delete' buttons. Its details are: Owner: World, Route URL: None, Barrier URL: None, and Map Services: OpenStreet (Type: OpenStreet, URL: http://gis102:6080/arcgis/rest/services/Utah/MapServer) and Utah (Type: ArcGISDynamic, URL: http://gis102:6080/arcgis/rest/services/Utah/MapServer). A 'Create Map Configuration' button is also at the bottom right.

Each configuration is identified by a header which contains the name for the configuration. The **Owner**, **Route URL**, **Barrier URL**, and **Map Services** fields display the setup information for the configuration.

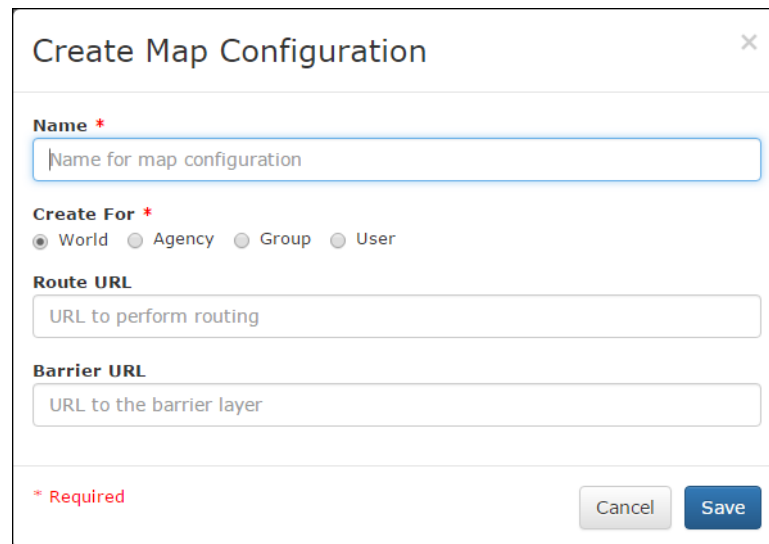
Creating a map configuration

Create a map configuration for each map that should be listed in the drop-down list in the **Maps** pane.

To create a map configuration:

1. In the Map Configurations screen, click **Create Map Configuration**.

The Create Map Configuration window opens.



2. Complete the following fields:

- **Name:** Enter a name for the configuration. For example, Springville. This field is required.
- **Create For:** Select a user level for the map, either World, Agency, Group, or User. The selected level is displayed in the **Owner** field of the map configuration. This field is required.
- **Route URL:** Enter the URL for the map service used for routing. This field must be completed for the map to support Quickest Route.
- **Barrier URL:** Enter the URL for the map service used for adding barriers. This field must be completed for the map to support barriers.

NOTE

For more information on creating map services that support routing and adding barriers, see your ArcGIS user documentation.

3. Click **Save**.

The configuration is saved and appears at the bottom of the Map Configurations screen.

**Editing or deleting
a map
configuration**

Map configuration settings can be edited. Additionally, if a map configuration is no longer needed or was created in error, then it can be deleted.

To edit or delete a map configuration, do one of the following:

- To edit the configuration, from the **Configuration Name** header, click **Edit**. The Edit Map Configuration window opens. Edit the desired settings, and then click **OK**. The changes are applied to the configuration.
- To delete the configuration, from the **Configuration Name** header, click **Delete**. A dialog box opens, asking to confirm whether the configuration should be deleted. Click **OK**. The configuration is deleted from the Map Configurations screen.

Adding a map service to a map configuration

A map service must be added to a configuration for a map to be displayed when the configuration is selected from the **Maps** pane. Multiple services can be added to a configuration to support different features.

NOTE

When choosing a map service, verify that the service provides the features needed for the map's intended use. Supported features are listed in the **Supported Operations** area of the map server's web page. For example, some map services support exporting the map and generating KML files, but not the Identify feature.

To view the map service's web page, in the **Map Services** area, in the **URL** field, click the hyperlink for the map service. For assistance with creating or modifying a map service, refer to your map service software documentation.

To add a map service to a map configuration:

1. From the desired configuration, click **Add Map Service**.

The Add Map Service window opens. The selected configuration name is displayed in the **Map Configuration** field.

2. Complete the following fields:

- **Name:** Enter a name for the map service. For example, *Streets*.
- **Type:** Select the layer configuration type from the drop-down list.

NOTE

It is not recommended to add two map services with tiled layer configurations that have different spatial references. The map configuration is able to display only the first of these services. The second service is inaccessible and is not displayed on the map.

- **URL:** Enter the URL for the layer configuration location.

3. Click **Save**.

The map service appears in the selected configuration.

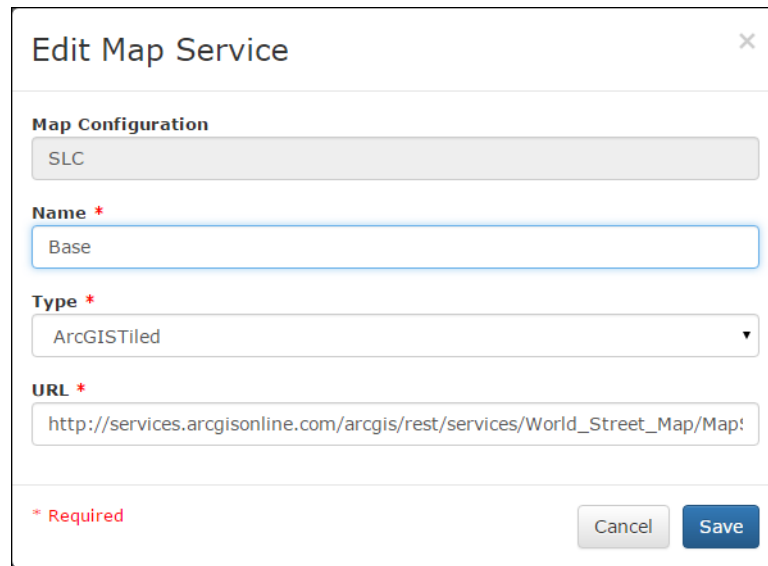
Editing a map service

A map service can be edited once it has been added to a configuration.

To edit a map service:

1. From the desired map configuration, in the **Map Services** area, click **Edit**.

The Edit Layer Configuration window opens.



2. Edit the values in any of the following fields:

- **Name**
- **Type**
- **URL**

3. Click **Save**.

The changes are applied to the selected map service.

Deleting a map service

If a layer is added in error or it is no longer needed, then it can be deleted. To delete a map service from a map configuration, in the **Map Services** area, click **Delete**. The map service is immediately deleted.

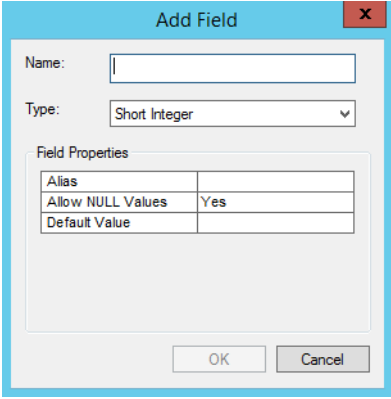
Adding hyperlinks

To show hyperlinks on the map, the hyperlinks must be added to features in the desired map service. The following instructions describe how to set up hyperlinks for common places in ArcGIS. For more information, refer to your ArcGIS user documentation.

To add hyperlinks:

1. In ArcGIS, open the .dbf table for the point table to which hyperlinks will be added. For example, Common Places.
2. Click **Options**, and then select **Add Field**.

The Add Field dialog box opens.



The Add Field dialog box is shown with the following fields:

- Name:** A text input field.
- Type:** A dropdown menu currently set to "Short Integer".
- Field Properties:** A table with the following rows:

Alias	
Allow NULL Values	Yes
Default Value	
- Buttons:** "OK" and "Cancel" buttons at the bottom right.

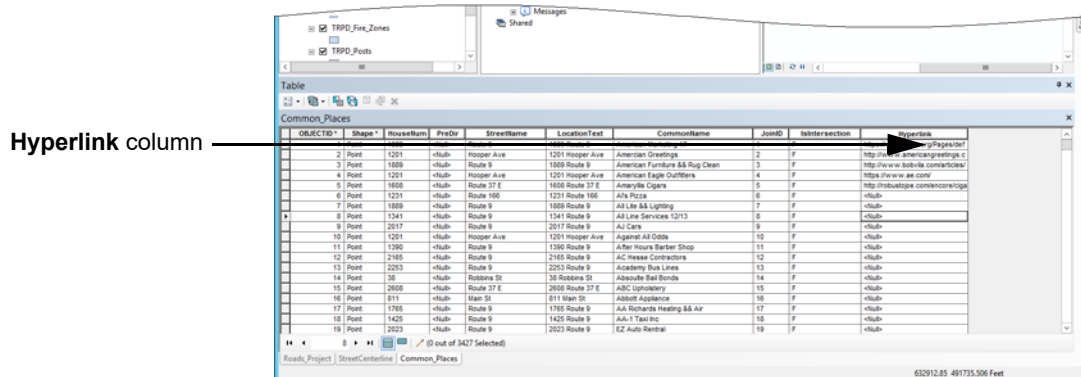
3. Complete the following fields:

- **Name:** Enter **Hyperlink**.
- **Type:** Select **Text** from the drop-down list.

4. If desired, in the **Field Properties** area, in the **Default Value** field, enter the number of characters for the field length. By default, the length is 50 characters. However, the **Default Value** field can be left blank.

5. Click **OK**.

The **Hyperlink** column is added to the table.



The screenshot shows a software interface with a table titled "Common_Places". A label "Hyperlink column" with an arrow points to the newly added "Hyperlink" column. The table has the following columns: OBJECTID, Shape, Housenum, Prefix, StreetName, LocationText, CommonName, JoinID, Intersection, and Hyperlink. The Hyperlink column contains various URLs and file paths.

OBJECTID	Shape	Housenum	Prefix	StreetName	LocationText	CommonName	JoinID	Intersection	Hyperlink
2	Point	1251	<Null>	Hosoper Ave	1251 Hosoper Ave	American Greetings	2	F	http://www.americangreetings.com
3	Point	1688	<Null>	Route 9	1688 Route 9	American Furniture & Rug Clean	3	F	http://www.totobode.com/index2
4	Point	1251	<Null>	Hosoper Ave	1251 Hosoper Ave	American Eagle Outfitters	4	F	https://www.ae.com
5	Point	1688	<Null>	Route 37 E	1688 Route 37 E	Amerylla Cigars	5	F	http://robertstg.com/enconaciga
6	Point	1251	<Null>	Route 188	1251 Route 188	ATA Pops	6	F	<Null>
7	Point	1889	<Null>	Route 9	1889 Route 9	All Lite & Lighting	7	F	<Null>
8	Point	1341	<Null>	Route 9	1341 Route 9	All Line Services 12/13	8	F	<Null>
9	Point	2017	<Null>	Route 9	2017 Route 9	All Cars	9	F	<Null>
10	Point	1251	<Null>	Hosoper Ave	1251 Hosoper Ave	Against All Odds	10	F	<Null>
11	Point	1386	<Null>	Route 9	1386 Route 9	After Hours Barber Shop	11	F	<Null>
12	Point	2165	<Null>	Route 9	2165 Route 9	AC Heese Contractors	12	F	<Null>
13	Point	2253	<Null>	Route 9	2253 Route 9	Academy Bus Lines	13	F	<Null>
14	Point	18	<Null>	Russell St	18 Russell St	Adelaide Bar Breads	14	F	<Null>
15	Point	2600	<Null>	Route 37 E	2600 Route 37 E	ABC Upholstery	15	F	<Null>
16	Point	811	<Null>	Main St	811 Main St	Abbott Appliance	16	F	<Null>
17	Point	1765	<Null>	Route 9	1765 Route 9	A&A Richards Heating & Air	17	F	<Null>
18	Point	1425	<Null>	Route 9	1425 Route 9	AA-1 Taxi Inc	18	F	<Null>
19	Point	2023	<Null>	Route 9	2023 Route 9	EZ Auto Rental	19	F	<Null>

6. In the **Hyperlink** field for the desired record, do one of the following:

- Enter the directory path to the file. URLs can also be added.
- If a directory location for all hyperlinks has been set, then enter a period and the unique portion of the path. For example, to link to a

photograph that is stored in the directory named `LiquorStoreFire.jpeg`, enter `./LiquorStoreFire.jpeg`. To set a hyperlink directory location, see [“Selecting a hyperlink directory location” on page 216](#).

7. Repeat step 6 for each record in the table that needs a hyperlink.
8. When finished, save the changes to the table and exit ArcGIS.

Selecting a hyperlink directory location

If the required privileges have been granted by your SAA, then a directory where map hyperlinks are stored can be set. For more information about adding hyperlinks, see your ArcGIS documentation.

To set a hyperlink directory location:

1. In the Advanced Settings window, click **Browse**.
The Browse for Folder dialog box opens.
2. Select the folder where the hyperlinks are stored.
3. Click **OK**.

The Browse for Folder dialog box closes. The selected file directory appears in the **Hyperlink Directory** field.

4. To save your changes, click **Save**.
5. To clear the **Hyperlink Directory** field, place the cursor in the field, and then click the **Clear** button (X).

Managing Icon Associations

Icon associations for calls and units are set by default. However, any icon associations can be changed as desired in the Icon Associations screen.

Understanding the Icon Associations screen

The Icon Associations screen displays the icons used on the map for your agency and their associated meanings.

Spillman Application Manager

WebApp Manager » Mapping » Icon Associations

Properties Map Configurations **Icon Associations** Icon Manager Open Map

Icon Associations Update

CALL TYPE	
Call Type	Icon
Law	law-incident.ico
EMS	medical-emergency.ico
Fire	fire.ico
Misc	domestic.ico

CALL NATURE

Show 10 entries Search:

Nature	Icon
Abandoned Vehic	Select an icon
Abdominal	Select an icon
Agency Assist	Select an icon
Aircraft	Select an icon
Alarm	Select an icon
Alcohol Offense	Select an icon
Allergy	Select an icon
Animal Noise	Select an icon
Animal Problem	Select an icon
Arson	Select an icon

Showing 1 to 10 of 133 entries Previous 1 2 3 4 5 ... 14 Next

The Icon Associations screen is divided into the following areas:

- **Call Type**
- **Call Nature**
- **Unit Type**

- **Unit Kind**

Each area is made up of icon association entries. Entries can be sorted in ascending or descending order. To change the sort order, click the column header.

Some entries are displayed on multiple pages, such as in the **Call Nature** area. To find an entry, do any of the following:

- Use the **Previous**, **Next**, or page number buttons to navigate the pages.
- Use the **Search** field to enter search criteria to filter the list.

To choose how many entries to show per page, in the **Show entries** field, select a number from the drop-down list.

Each area with multiple pages contains a footer that indicates the total number of entries available. If the entries are filtered, then the number of entries filtered out of the total number available is also displayed.

Setting an icon association

To set an icon association:

1. Open the Mapping web application. See [“Accessing the Mapping web application” on page 205](#).
2. Click **Icon Associations**.
The Icon Associations screen opens.
3. In the desired area, locate the row that contains the entry to be edited. See [“Understanding the Icon Associations screen” on page 217](#).
4. Select an icon from the drop-down list.
5. Repeat steps 3–4 until all the desired icon associations are set.
6. Click **Update**.

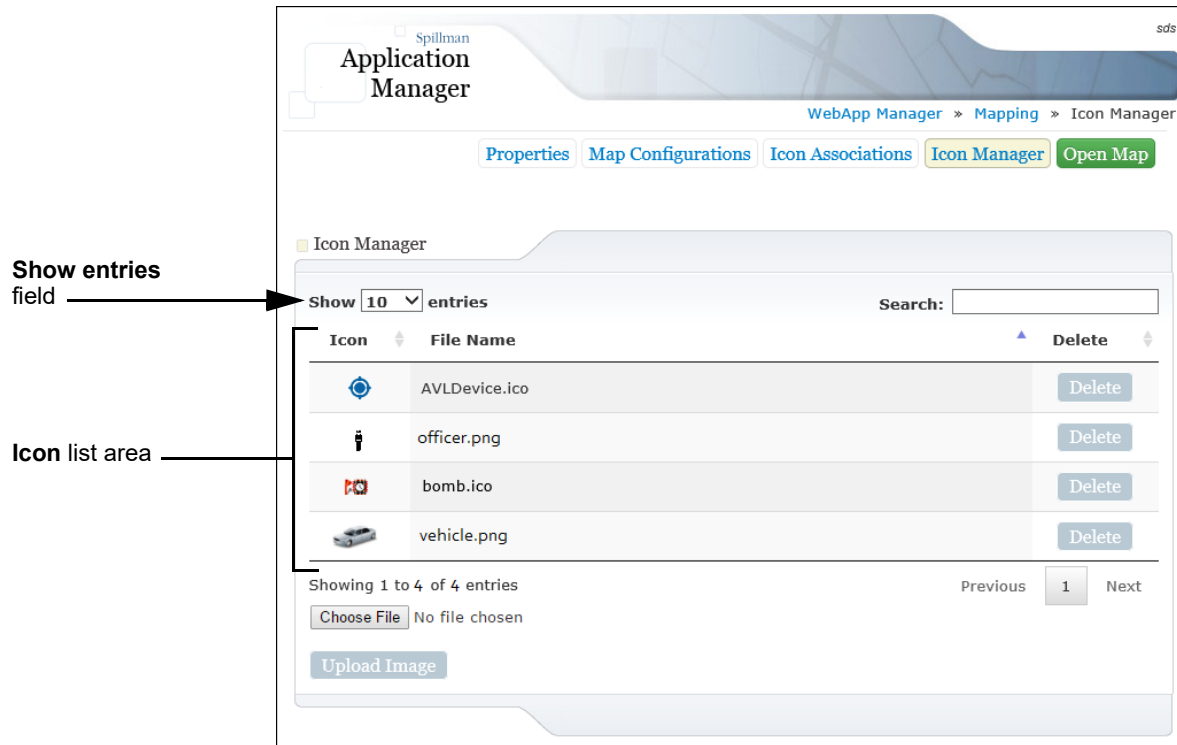
The icon associations are applied to the map.

Managing Custom Icons

Custom icons can be uploaded to the Mapping web application using the Icon Manager screen.

Understanding the Icon Manager screen

The Icon Manager screen displays the custom icons your agency has uploaded to the Mapping web application.



Custom icons can be sorted in ascending or descending order. To change the sort order, click the column header.

Depending on the number of icons your agency has uploaded, icons might be displayed on multiple pages. To choose how many icons to show per page, in the **Show entries** field, select the number of icons to show from the drop-down list.

To find an icon, do any of the following:

- Use the **Previous**, **Next**, or page number buttons to navigate the pages.
- Use the **Show** field to increase or decrease the number of icons shown per page.
- Use the **Search** field to enter search criteria to narrow the list and display only icons that match the criteria.

The footer at the bottom of the Icon Manager screen indicates the total number of icons available. If the icons are filtered, then how many icons were filtered from the total number of icons available is also displayed.

Adding or removing custom icons

To add or remove a custom icon:

1. Open the Mapping web application. See [“Accessing the Mapping web application” on page 205](#).
2. Click **Admin**.
The Map Configurations screen opens.
3. Click **Icon Manager**.
The Icon Manager screen opens.
4. To upload an icon, click **Choose File**.
The File Manager opens.
5. Select the file for the desired icon, and then click **Open**. The compatible file formats are Icon (.ico), Graphics Interchange Format (.gif), Portable Network Graphics (.png), and Scalable Vector Graphics (.svg).
The File Manager closes. The file name appears next to the **Choose File** button.
6. Click **Upload Image**.
The Image is uploaded, and is displayed in the **Icon List** area.
7. To delete an icon, in the row of the desired icon, click **Delete**.
A confirmation dialog box opens asking whether the icon should be deleted.
8. To delete the icon, click **OK**.
The icon is removed from the **Icon List** area.

Managing Bookmarks

In the CAD map, use the **Bookmarks** pane to manage bookmarks set at a World, Group, or Agency level.

To open the **Bookmarks** pane, do any of the following:

- From the toolbar, click **Bookmarks**.
- From the menu bar, select **Tools > Bookmarks**.
- Press Ctrl+B.

To manage bookmarks, do any of the following:

- [“Adding a bookmark” on page 221](#).

- “Editing a bookmark” on page 222.
- “Deleting a bookmark” on page 223.
- “Managing favorites” on page 223.

Adding a bookmark

Bookmarks can be added to the **World**, **Agency**, **Group** or **User** menu group.

To add a bookmark:

1. Verify the map is at the desired location and extent.
2. Open the **Bookmarks** pane.
3. Click the **Add Bookmark** button.

The Add Bookmark window opens.

4. In the **Bookmark Scope** area, select the level of access for the bookmark, either **World**, **Agency**, **Group**, or **User**.

If **Agency** or **Group** is selected, then a drop-down list appears with the available groups or agencies. Continue to step 5. Otherwise, continue to step 6.

NOTE

Setting a bookmark at the **User** level adds the bookmark to your **User** menu group. To set bookmarks for other users, select **World**, **Group**, or **Agency**. The appropriate privileges are required to set bookmarks for other users.

5. Select the desired agency or group from the drop-down list.
6. In the **Bookmark Name** field, enter the name for the bookmark.

7. If desired, to display the bookmark in the **Favorites** menu group, select the **Add to my Favorites** check box.

8. Click **Save**.

The bookmark is added to the selected menu group, or to the **Favorites** menu group.

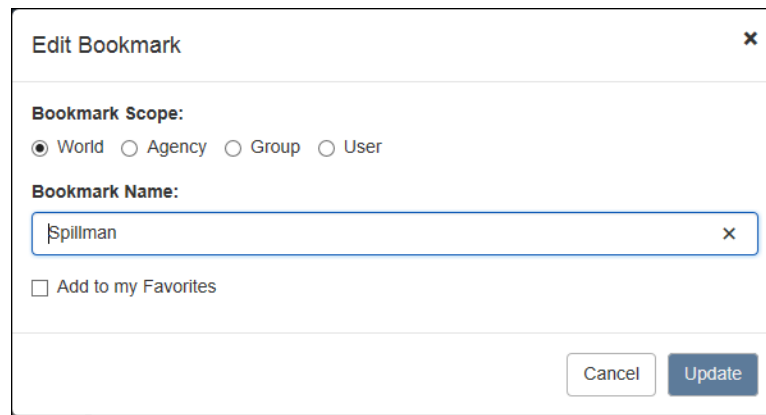
Editing a bookmark

Bookmarks can be edited.

To edit a bookmark:

1. In the CAD map, from the **Bookmarks** pane, select the menu group containing the bookmark.
2. Rest the mouse pointer on the desired bookmark, and then click the **Edit** icon.

The Edit Bookmark window opens.



3. Do any of the following:
 - In the **Bookmark Scope** area, change the level of access for the bookmark.
 - In the **Bookmark Name** field, change the bookmark name.
 - To add or remove the bookmark from the **Favorites** menu group, select or clear the **Add to my Favorites** check box.

4. Click **Save**.

Depending on the changes made, occurs:

- The bookmark name is changed in the **Bookmarks** pane.
- The bookmark is moved to the **Favorites** menu group.

Deleting a bookmark

Bookmarks can be deleted.

To delete a bookmark:

1. In the CAD map, from the **Bookmarks** pane, select the menu group containing the bookmark.
2. Rest the mouse pointer on the desired bookmark, and then click the **Delete** icon.

The bookmark is immediately deleted.

Managing favorites

In addition to managing favorites when adding or editing a bookmark, favorites can be managed from the **Bookmarks** pane.

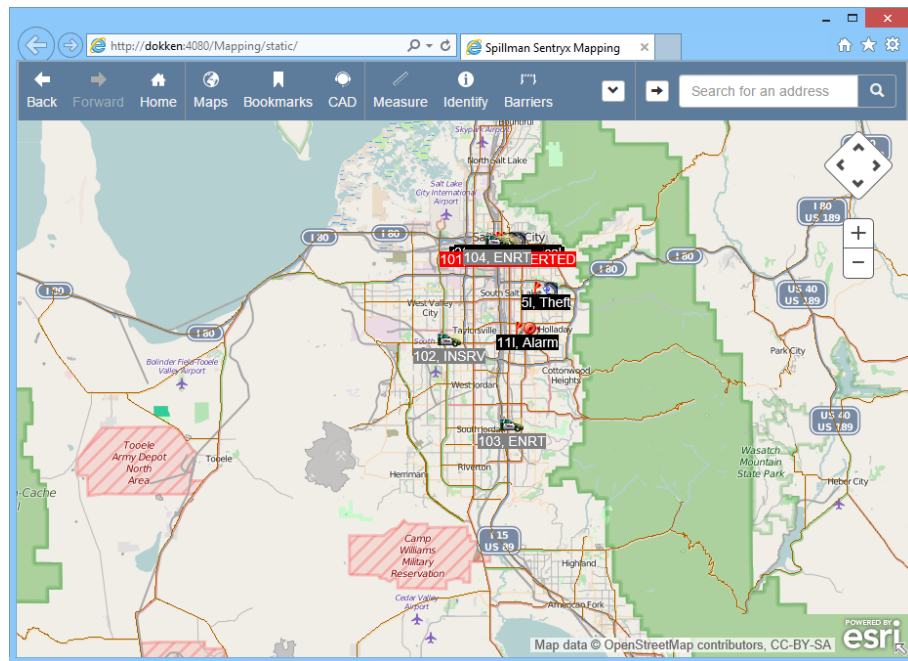
To mark a bookmark as a favorite, from the **Bookmarks** pane, rest the mouse pointer on the desired bookmark, and then click the **Favorites** icon.

The bookmark is marked as a favorite and is moved to the **Favorites** menu group. An icon is displayed next to the bookmark's name, indicating whether the bookmark is set at the World, Agency, Group, or User level.

To remove a bookmark from the **Favorites** menu group, rest the mouse pointer on the desired bookmark, and then click the **Favorites** icon. The bookmark is moved back to its assigned menu group. To delete the bookmark, see [“Deleting a bookmark” on page 223](#).

Viewing the Web Map

A web version of the map can be opened in a browser. To open the map in a browser, from the web application, click **Open Map**. If prompted, enter your username and password. The map in your default browser opens to the Home extent.



To view additional toolbar options, click the chevron.

To view the map in Night mode, from the toolbar, click **Settings**, and then select the **Night Mode** check box. To turn off Night mode, clear the check box.

The web version of the map has many of the same features as the map in CAD. However, the following right-click menu options are not available:

- Call Information screen
- Unit Information screen
- Dispatching options
- Add Call
- Pictometry
- Opening a third-party map version
- Message Unit

Setting Up Pictometry

For both Mapping modules, the CAD map can be opened in the Spillman Pictometry map.

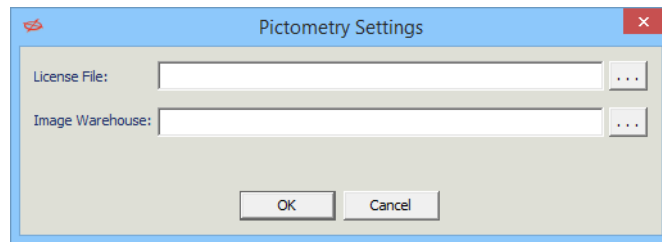
To open the CAD map in the Spillman Pictometry map, setup must be completed only once for each computer using the Pictometry map, regardless of the number of users that will sign in to the computer. For software requirements and complete instructions on how to use Pictometry, see the *Pictometry Map Guide*.

Wireless networks, such as those used for Mobile, cannot sustain the amount of memory required by the detailed imagery. Therefore, it is recommended to load the Pictometry imagery directly onto each computer running the map, rather than storing the imagery on the network.

To set up Pictometry:

1. Open the map in Pictometry by selecting **File > Open in Pictometry** from the menu bar, or right-click the icon for a call, unit, or device, and then select **Open in Pictometry**.

The Pictometry Settings dialog box opens.



2. In the **License File** field, enter the location of the computer's Pictometry License File (.plf), or click the **Search** button (...) to locate the file.
3. In the **Image Warehouse** field, enter the location of the computer's Pictometry Image Warehouse file (.piw), or click the **Search** button (...) to locate the file.
4. Click **OK**.

5. Repeat steps 1–4 for each computer that accesses the Pictometry map.

NOTE

Once setup is complete, the License and Image Warehouse file locations can be viewed from the Pictometry map. To view the file locations, from the Pictometry map menu bar, select **File > Settings**. The Settings dialog box opens and the License File and Image Warehouse locations are displayed.

Chapter 6

Setting Up Security

Jump to topic:

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Introduction

This chapter lists the CAD menus, tables, programs, and reports so that you can allow or deny certain groups and individual users access to them. It also lists levels of access that you might find appropriate for your “average user.” These suggestions are general and will not be appropriate for every agency, so consider carefully the unique needs of your agency. *Spillman Technologies is not responsible for any damage caused by inappropriate access privileges.*

Security setup instructions for Geobase and Response Plans (if you purchased those modules) are in their respective manuals.

In addition to setting up security for each of your agency’s modules, be sure to give all users privileges to basic features of the software as described in the *Security Setup and Maintenance Manual*.

Giving Basic Access: Call Taker

The following basic access is suggested for a user who is a CAD call taker only, with no dispatching functions.

Description	Table Name	Privileges
Dispatch Menu	dispatch	Grant Access privilege.
Call Taker's Screen (master Calls table)	calls	Grant Access, Read, and Add privileges for call takers who have no dispatching functions (and no access to the program cad). Grant Modify privilege to users who must be able to reopen closed calls using the Open button. Be judicious in providing Modify access; there might be legal ramifications to allowing users to change completed call records.
Names table	nmmain	Grant Access, Read, Add, and Modify privileges for call takers who access and/or modify existing complainant name records or add new ones.
Call Comments	callinfo	Grant Access, Read, and Add privileges for call takers and dispatchers. Do not grant Modify privileges.

Giving Basic Access: Call Taker / Dispatcher or Dispatcher

For basic CAD users who take calls and dispatch, or who dispatch only, provide the access specified above for Call Taker *plus* the following basic access.

Description	Name	Privileges
Computer-Aided Dispatch	cad	Grant Access privileges so that CAD users can access the CAD status screen and basic CAD commands such as Add Call, Dispatch Unit, View Special Instructions, and Add Radio Log Entry. Alone, access to cad does not provide access to other tables such as the Covering Unit table, the Units table, the RadioLog table, and the Accidents table. Separate access is required for those.
Vehicle table	vhmain	Grant Access privileges so that CAD users can access the Vehicle table via the CAD ve, rg, and rqv commands.
Wanted Persons table	wamain	Grant Access privileges so that CAD users can access the Wants table via the CAD wa command.
Property table	prmain	Grant Access privileges so that CAD users can access the Property table via the CAD pro command.

NOTE

Without access to calls, a user with cad access can still modify an active call using the CAD mc command. However, once the call is completed, the user cannot modify the call.

Giving a CAD User Additional Access

In addition to the basic CAD access specified above for the Call Taker and Call Taker/Dispatcher, you might give a CAD user/group access to some or all of the following CAD functions. The privileges shown are provided only as suggestions.

Description	Table Name	Privileges
Master Calls table via involvements	cdcall	Grant Access privileges so that CAD users can access the master Calls table via involvements and via the CAD Call ID field on the law, fire, and EMS screens.
Radio Log Table	rlmain radiolog	Grant Access privileges to rlmain so that CAD users can access the radio log table via the CAD ra command. Radiolog gives access via the menu or the Run function. Users do not require access to rlmain or radiolog to add radio log entries using the CAD rl command or to view radio log entries from the law, fire, or EMS Last Radiolog field.
Display Unit Radio Log	radiolst	Grant Access privileges so that CAD users can view unit radio log from the menu (for users with no access to cad). Without radiolst access, users with cad access can still view unit radio log, using the CAD rh command.
Officer Radio Log Table	rlofficr	Grant Access privileges so that CAD users can access the officer radio log table via CAD rlo command, menu, and the Run function.
Assign Officers to Units	upduo	Grant Access and Modify privileges so that CAD users can have limited access to CAD units table via CAD uo command and the menu, allowing them to change unit information such as zone and assigned officers.
Covering Units table	cdcover	Grant Access , Add , and Modify privileges so that CAD users can access CAD cu command to set covering unit for a particular unit and time frame.
Wrecker Call History Table	wrhistory	Grant Access privileges so that CAD users can view wrecker call history.

Giving Administrative CAD Users Additional Access

Administrative CAD users are CAD supervisors, dispatchers, records personnel, and others who set up dispatch positions or maintain information used by call takers and dispatchers. As an SAA, you must determine which tables you will delegate the maintenance of, and to whom.

The program names and privileges listed below provide access to these CAD administrative programs via the menu and the Run function within CAD. Depending on their duties, CAD administrative users might also need access to some or all of the CAD programs listed previously in this CAD setup section. The privileges listed are only suggestions.

Description	Table Name	Privileges
CAD System Configuration Menu	cadconf	Grant Access privilege so that administrative CAD users can access the CAD administrative programs in this menu.
Personnel Skills Table	cdskill	Grant Access, Add, Modify, and Delete privileges so that administrative CAD users can change skills information according to their privileges in the table. Without access to cdskill, dispatchers can still search for officers with a particular skill, using the CAD ss command.
Resource Table	resource cdsource	Grant administrative CAD users Access, Add, Modify, and Delete privileges to resource and cdsources. Resource allows you to access a table of available equipment not owned by your agency, via the menu or the Run function. Cdsources allows users to access the full Resource table via the CAD res command. Without access to resource or cdsources, the CAD user can still search for particular resources, using the CAD ri command. Instructions for setting up the Resource table are in the Spillman online help.
Policy Violation Table	pvmmain	Grant Access, and Add privileges to administrative CAD users who maintain the Policy Violation Table. If you want a fairly secure log of policy violation entries, be careful giving Modify or Delete access to this table.
Dispatch Positions Table	cdpos	Grant Access, Add, Modify, and Delete privileges to at least one person on each shift. If the radio log printer goes down, that user can clear the Radio Log Printer field in this table for each position in access until the printer is fixed.
Dispatcher Assignment Table	cdassign	Grant Access, Add, Modify, and Delete privileges so that administrative CAD users can define users' default dispatch positions. Without access to cdassign, a user can use the CAD dr command to reset his/her assigned dispatch position to another predefined position or assume another user's position while the other user is not available.

Description	Table Name	Privileges
CAD Status Screen Setup	cdsetup	Grant Access, Add, Modify, and Delete privileges so that administrative CAD users can add new status screen formats permanently, for availability to all CAD users. Without access to cdsetup, a CAD user can still temporarily change his/her status screen setup, using the CAD <code>co</code> command.
Terminal Mapping Table	cdttys	Grant Access, Add, Modify, and Delete privileges so that administrative CAD users can define E9-1-1 setup and PCs with two monitors.
Units Table	cdunit	Grant Access, Add, Modify, and Delete privileges so that administrative CAD users can modify, add, and delete units in the CAD units table via the menu and Run function.
Assign Units to Shifts	updsu	Grant Access privileges so that administrative CAD users can change a shift's units from the menu. Without access to updsu, the CAD user can still do this, using the CAD <code>us</code> command.
Unit Recommendation Table	recunit	Grant Access, Add, Modify, and Delete privileges so that during CAD setup administrators can define units the system should recommend for particular nature of incident and/or call zone and/or address. For this program to work, the application parameter <code>cdrecuni</code> must be set to YES .
Recommended Units Status Order	cdrustat	Grant Access, Add, Modify, and Delete privileges so that during CAD setup administrators can define and prioritize unit ten-codes that will cause a unit to be recommended. Works in conjunction with <code>recunit</code> .
Responding Units Status Order	cdstatse	Grant Access, Add, Modify, and Delete privileges so that during CAD setup administrators can define the next default status that will fill in for a unit when it is updated.
Unit Rotation Table	rptburot	Grant Access, Add, Modify, and Delete privileges so that during CAD setup administrators can define rotations such as those for contracted ambulance services, so that the contractors have a fair rotation. Used in conjunction with <code>recunit</code> . For this program to work, the application parameter <code>cdrecuni</code> must be set to YES .
Special Instructions Table	cdspeci	Grant Access, Add, Modify, and Delete privileges so that during CAD setup administrators can define agency instructions for various natures and topics, such as heart attack and riot, and can define agency lists such as judges' phone numbers.
Alarms Table	cdalarm	Grant Access, Add, Modify, and Delete privileges so that during CAD setup administrators can define alarm records.
Towing Rotation Menu	towmenu	Grant Access privilege so that administrative CAD users can access the Towing Rotation Menu.
Wrecker Company Table	tbwreck	Grant Access, Add, Modify, and Delete privileges so that during CAD setup administrators can define each wrecker company's code, address, and contact persons.

6 Setting Up Security

Giving Administrative CAD Users Additional Access

Description	Table Name	Privileges
Wrecker Rotation Table	wrrotate	Grant Access, Add, Modify, and Delete privileges so that during CAD setup administrators can define wrecker rotations.
Wrecker Rotation Type Codes	wrrotyp	Grant Access, Add, Modify, and Delete privileges so that during CAD setup administrators can define the Wrecker Rotation Type Codes.

Limited Access CAD

Limited Access CAD (`caddo`) is a view-only version of the CAD status screen. This program is useful for duty officers, supervisors, and other users who need to monitor dispatch without adding, modifying, or deleting information. Grant individual or group privileges to users or groups that need Limited Access CAD.

Giving a CAD User Access to Other Modules/Tables from CAD

CAD provides specific commands for accessing some other tables in the software that are useful to CAD users. Those tables are listed below. For tables in modules that your agency has purchased and implemented, set privileges as appropriate for each applicable CAD user or group, usually only Access, in some cases Add or Modify also.

Each program is shown with both its program name and its table name. To allow the user to access the screen using the appropriate CAD command, you must give access to the *table* name. To allow the user to access the screen through the Run function or through the menus, give access to the program name.

Almost any Spillman table is accessible to the CAD user through use of the RUN function key or the RUN command at the CAD command line, if the user has appropriate privileges for that table. You might also want to give access to users as you deem appropriate for the user's or group's duties.

Screen	Program Name	Table Name
Accident table	accident	acmain
Citation table	citation	ctmain
EMS Incident table	ems	emmain
Equipment table	equipmnt	eqmain
Fire Incident table	fire	frmain
Hazardous Materials table	hazmat	hmcbase
Law Incident table	law	lwmain
Licenses and Permits table	license	lpmain
Premises Information table	premises	bimain
Water Sources table	water	frwater

CAUTION

Users who must reopen calls must have at least Access privilege for the associated incident record. Otherwise, the system creates a duplicate incident record. Be especially careful with records that are partitioned or password protected.

Giving Users Access to Reports

Users who run CAD reports need Access privilege to some or all of the following reports.

Description	Name
CAD System Reports Menu	cadrep
CAD Call Response Times	rpcdanal
CAD Call Avg. Resp. Times	rpcdavar
CAD Avg. Response Times Detail	rpcdavrpt
Fastest CAD Call Resp. Times	rpcdbest
CAD Call Excessive Resp. Times	rpcdexar
CAD Call Dist of Resp. Times	rpcdpent
CAD Call Response Time Log	rpcdresp
CAD Call Times, by Location	rpcdanlo
CAD Calls by Day and Time	rpcdcedt
CAD Call Address History	rpcdcahr
Total CAD Calls Received	rpcdtccr
How Calls Are Received	rpcdhwrc
CAD Call Narrative Search	rpcdcnsr
CAD Alarm Summary Report	rpcdalrm
E-911 Data Report	rpcde911
Officer Radio Log Summary	rprlorsm
Officer Status Change Totals	rprlost
Unit Radio Log Statistics	rprlrlsr
Unit Radio Log Summary	rprlrlsu
Unit Radio Log Incident Report	rprlinc
Intrst. Ptrl./Cntrect. Policing	rprlipcp

Description	Name
Resources Summary Report	rpcdreso
Agencies Inv. Incident Summary	rptotinc
Wrecker Company Call History	rpwrwcch

